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Built2Spec

Built to Specifications – Tools for the 21st Century Construction Site

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D3.7 IAQ indicators

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Executive summary

The **Deliverable D3.7** entitled “IAQ indicators” is a public document delivered in the context of WP3, Task 3.2: Indoor Air quality.

This work is part of the project on Tools for the 21st Century Construction Worksite (BUILT2SPEC) and is financed by the European Union under the Horizon 2020 Program.

This deliverable D3.7 aims to set the indicators that will be used to qualify the Indoor Air Quality (IAQ). Depending on the indicator value measured, the tool will ask the user, or not, to perform more measurements in order to search for pollution sources. Indicators will be set for each pollutant/parameter. Group indicators (pollution indicator, comfort indicator, confinement indicator) will be set as well. All the indicator values will be available in a document in the VCMP so the expert can analyze the collected data in details.

This document is structured as follows:

- The context of the task is presented in a general introduction,
- The pollutant concentration thresholds given by national regulations and by national and international agencies are then presented,
- The parameters to follow are then selected among the lists of pollutants presented in the documents,
- The tool performance are analyzed in order to refine the list of pollutants followed during the pilot test,
- The indicators and group indicators are determined.

1 TABLE OF CONTENT

Abbreviations

B2S = Built to Specifications

DOA = Description of Action;

CS = Communication Strategy;

WP = Work Package.

2 Introduction

Indoor air quality (IAQ) is a recent problematic but it has become a real public health issue. In the BUILT2SPEC framework, it is necessary to integrate some solutions to prevent any health risk inside the *survey* platform.

The deliverable 3.7 is the fourth deliverable written in the context of the task 3.2 about the development of an IAQ analyzer. In this deliverable, we will define indicators and group indicators (indexes) which will allow to assess the IAQ. The values measured by the analyzer will be then compared to the indicators value in order to determine if the IAQ test results in a "FAIL" or a "PASS". As we defined the measurement protocol, the test will be performed in order to assess the building performance regarding IAQ matter once all the elements are set in place. It will ensure that the future occupants do not encounter any risk by living/working in the building. It will also help to correct the problems if there is any. Once the IAQ test performed, the results will be sent to the expert for analysis and will be stored within the platform so that the people designed to check it can access it (design team, construction team, etc.).

The deliverable 3.7 summarizes the work that has been done to set the indicators values with the following steps. The first step was to analyze the national regulation of many countries and the guide values of several agencies in order to define a preliminary list of monitored compounds. Then, the detection levels of the analyzer were compared to the worldwide minimum threshold values of the pre-defined list of pollutants in order to refine the list of pollutants followed later on site. Finally, the parameters were classified in different categories in order to display group indicators (indexes) that can indicate in a first glance the origin of the problem if there is any.

3 IAQ context

We breathe about 12,000L of air per day. This air is composed of several compounds among which some have been determined as dangerous for human health. IAQ constitutes a major issues for human health as we spend 85% of our time indoor[1] where we are exposed to indoor pollutants. These pollutants can be biological (bacteria, moistures, etc.), chemical (volatile organic compounds), or physical (radon, particles, etc.). There are many sources of pollutants: construction and decoration materials, human activities (cooking), consumer products (air fresheners, perfumes, etc.), furniture, and outdoors pollutants.

The IAQ is a major issue regarding human health. Indeed, in 2012, WHO reported that bad air quality was responsible for 600,000 deaths per years within the EU, among which 118,000 can be attributed to a bad IAQ.[2] Moreover, it is also a major issue regarding economic matter. Even though the costs are very hard to determine precisely as the impacts are still not well known, all the studies estimate the costs to several tens of billions of euros. For example, the EPA (Environmental Protection Agency) estimated that the sick leaves due to a bad IAQ cost about 20 billion dollars every year just within the USA (compensation and care), and that these costs could even reach 120 billions of dollars if the loss of productivity due to the staff absence is taken into account.[3] Also, in 2015, WHO estimated that the deaths and the sicknesses caused by a bad IAQ cost about 1,430 billion euros per year over the 53 countries in EU.[4]

The threshold values from which the IAQ quality will be qualified as bad will strongly depends on the IAQ legislation in the EU but also in the world as this type of legislations tends to align with the strictest regulations worldwide. In order to have a good overview of the legislation worldwide, a deep analysis was conducted. Finally, we found the IAQ legislation for twelve more countries (so 19 in total): Hungary[5],

[1] Anses - Agence nationale de sécurité sanitaire de l'alimentation de l'environnement et du travail, "Qualité de l'air" [Online] Available: https://www.anses.fr/fr/content/qualité-de-l'air. [Accessed: 29-Apr-2015].

[2] WHO, **2014**, "Almost 600 000 deaths due to air pollution in Europe: new WHO global report" [Online] Available at: http://www.euro.who.int/en/health-topics/environment-and-health/air-quality/news/news/2014/03/almost-600-000-deaths-due-to-air-pollution-in-europe-new-who-global-report. [Accessed: 14-Apr-2016].

[3] T. Gonsoulin and T. Worthan, **2009**, "The consequences of bad IAQ," [Online] Available at: http://www.facilitiesnet.com/iaq/article/The-Consequences-Of-Bad-IAQ-Facilities-Management-IAQ-Feature--10618

[4] WHO Regional Office for Europe, OECD, **2015**, "Economic cost of the health impact of air pollution in Europe: Clean air, health and wealth". Copenhagen: WHO Regional Office for Europe.

[5] Limit values Hungary: Ministry of Health and Ministry of Social and Family Affairs on the Chemical Safety at Work, Annex 1, **2000**, Article 25/2000.(IX.30.) EüM-SZCSM együttes rendelet: A munkahelyek kémiai biztonságáról, 1.melléklet, Magyar Közlöny, 99 szám 6150-6178 old. módosítva a 13/2002 (XI.28.) ESZCSM – FMM és a 13/2006 (III. 23.) EüM-FMM együttes rendelettel, elérhető: Joint Decree No. 25/2000.(IX.30.) EüM-SZCSM issued by the., Magyar Közlöny, Vol 99, pp 6150 - 6178, modified by Joint Decree No 13/2002(XI.28.) ESZCSM – FMM and Joint Decree No 13/2006 (III. 23.) EüM-FMM. Available at: www.mhk.hu

Mexico[6], Estonia[7], Belgium[8], Argentina[9], Austria[10], Denmark[11], USA[12], Australia[13], New Zealand[14], Switzerland[15], and Canada[16].

4 Definition of the monitored parameters

The analysis revealed that there is not many regulations about IAQ worldwide. The only existing legislations are the ones regarding workplace exposure limits, which correspond to the pollutants concentration values considered as acceptable for 8 hours exposure per day. In a general way, for buildings such as housings and establishments open to public, there is no real legislation for IAQ worldwide. Besides, compared to the values given by national agencies, the workplace exposure limits are quite high for each pollutant in every country.

[6] Limit values Mexico: Secretaria del trabajo y prevision social segunda seccion,**1999**, NORMA Oficial Mexicana NOM-010-STPS-1999, Condiciones de seguridad e higiene en los centros de trabajo donde se manejen, transporten, procesen o almacenen sustancias químicas capaces de generar contaminación en el medio ambiente laboral.

[7] Limit values Estonia: Government of the Republic, **2001**, Regulation n° 293 Töökeskkonna keemiliste ohutegurite piirnormid, RT I 2001, 77, 460. Available at: https://www.riigiteataja.ee/akt/12874145

[8] Limit values Belgium: Service Publique Fédéral Emploi, Travail et Concertation Sociale, **2014**, Arrêté royal modifiant l'arrêté royal du 11 mars 2002 relatif à la protection de la santé et de la sécurité des travailleurs contre les risques liés à des agents chimiques sur le lieu de travail

[9] Limit values Argentina: Ministerio de Trabajo, Empleo y Seguridad Social, **2003**, Resolución 295/2003 Apruébanse especificaciones técnicas sobre ergonomía y levantamiento manual de cargas, y sobre radiaciones.

[10] Limit values Austria: Bundesministers für Arbeit, Soziales und Konsumentenschutz, **2011**, Grenzwerte für Arbeitsstoffe sowie über krebserzeugende und über fortpflanzungsgefährdende (reproduktionstoxische) Arbeitsstoffe (Grenzwerteverordnung 2011 – GKV 2011)

[11] Limit values Denmark: Arbejdstilsynet, **2007**, At-Vejledning – STOFFER OG MATERIALER – C.0.1 (Limit Values for Substances and Materials)

[12] Limit values USA: Occupational Safety & Health Administration, **1999**, Regulations, Standards - 29 CFR, Part 1910 - Occupational Safety and Health Standards, Subpart Z - Toxic and Hazardous Substances, Section 1910 – 1000 –Air contaminants

[13] Limit values Australia: Safe Work Australia, **2013**,Workplace Exposure standards for Airborne Contaminants. Available at: www.safeworkaustralia.gov.au

[14] Limit values New Zealand: Ministry of Business, Innovation and Employment, **2013**, Workplace Exposure Standards and Biological Exposure Indices. Available at: www.mbie.govt.nz.

[15] Limit values Swiss: Suva, Protection de la santé au poste de travail, **2014**, Valeurs limites d'exposition aux postes de travail 2014

[16] Limit values Canada: National Research Council Canada, **2005**, Indoor Air Quality Guidelines and Standards

The Annex 2 gathers the documents presenting the regulation in every EU countries from which the partners are from: France[17], Germany[18], Ireland[19], Italy[20], Netherlands[21], Spain[22], and United Kingdom[23].

Although there is not strong national or international regulations in place, it exists a lot of standards and guideline values that have been defined by organizations or institutes working on this subject. There is generally at least one institute working on this matter per country. Also, the World Health Organization (WHO) developed several guidelines values for nine selected pollutants[24] that have been recognized as dangerous for human health. These pollutant concentration values are much more restrictive that the ones for workplace exposure limits, and one can think that these values will become standards in the next years.

The data collected showed that there is a huge gap between the threshold values given for work exposure limits by national regulations and the ones given as guide values by national or international agencies. Indeed, even for pollutants considered as very dangerous for the occupants' health such as the benzene, there is a factor 1000 between the work exposure limit and the guide value. This phenomenon shows that the authorities have not taken the matter very seriously so far but that there is a trend for the improvement of the IAQ on the long term.

A deep analysis of these documents lead us to select 25 pollutants among all of the pollutants present in the different tables: Formaldehyde, Benzene, Naphtalene, Trichloroethylene, Tetrachloroethylene, Acetaldehyde, Toluene, Xylene, Styrene, 1,2,4-trimethylbenzene, 1,4-dichlorobenzene, Ethylbenzene, 2-butoxyethanol, Acrolein, α-pinene, Limonene, Hexanal, delta-3-carene, TVOC, NO_2, CO, CO_2, PM 2.5, PM10, and radon. They were selected because they are representative of different pollution sources (external, construction material, bad combustion, etc.) and they are recognized as harmful for the human health (low concentration guide values/thresholds). In consequence, it appeared essential to follow their concentration when it comes to IAQ matter. Moreover, there are measured in most of the countries, and most of them appeared in the new regulation about material labelling in France. **Ideally, all these pollutants should be assessed by the analyzer** but this list had to be reduced regarding the analyzer performance and the relevance to assess these different components during the different construction phases. For example, **we already ruled out the TVOC** as its relevance is very low. Indeed, the TVOC concentration takes into account all the organic compounds with a chain containing between 6 and 12 carbon. However, some organic compounds with this criteria are not harmful so it will not have an impact on the occupants' health, and is then irrelevant to measure for the worker safety. For the indoor air

[17] Limit Values France: INRS : L'institut national de Recherche et de Sécurité, **2016**, "Valeurs limites d'exposition professionnelle aux agents chimiques en France" Available at: http://www.inrs.fr/media.html?refINRS=ED%20984 [accessed the 23rd of December, 2016]

[18] Limit values Germany: Bundesministerium für Arbeit und Soziales, 2006, Technische Regeln für Gefahrstoffe, Arbeitsplatzgrenzwerte, TRGS 900 and TGRS 910; Available at: http://www.baua.de/de/Themen-von-A-Z/Gefahrstoffe/TRGS/TRGS-900.html

[19] Limit values Ireland: Health and Safety Authority, **2011**, 2011 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agent) Regulations 2001. S.I. No. 619 of 2001.

[20] Limit values Italy: Ministero del Lavoro e delle Politiche Sociali – Ministero della Salute, **2008**, Criteri di qualificazione della figura del formatore per la salute e sicurezza sul lavoro, articolo 6, comma 8, lett. m-bis, del Decreto Legislativo n. 81/2008 e s.m.i., Allegato XXXVIII.

[21] Limit values Netherlands: Minister van Sociale Zaken en Werkgelegenheid, **2016**, Arbeidsomstandighedenregeling. Available at http://wetten.overheid.nl/BWBR0008587/20160401/0/afdrukken

[22] Limit values Spain: Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), **2008**, Limites de exposicion profesional para agentes quimicos en Espana

[23] Limit values United Kingdom: Health and Safety Executive , **2011**, EH40/2005 Workplace exposure limits

[24] WHO, **2010**, Guidelines for indoor air quality: selected pollutants, ISBN 978 92 890 0213 4

pollutants, it could be also envisaged to classify them according to their impact on human health. The threshold values found for these 25 pollutants in the different countries are summarized in Table 1 (long time exposure) and in Table 2 (short time exposure). The threshold values given by WHO, Europe[25], Environmental and Occupational Health & Safety (ANSES)[26], and the values given for labelling in France[27] are summarized in Table 3.

[25] The Commission of the European Communities, **2006**, COMMISSION DIRECTIVE 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC

[26] ANSES, **2015**, Expertise en appui à l'étiquetage des produits d'ameublement

[27] Le ministère de l'écologie, du développement durable, des transports et du logement - le ministère de l'économie, des finances et de l'industrie - le ministère du travail, de l'emploi et de la santé, **2011**, Arrêté du 19 avril 2011 relatif à l'étiquetage des produits de construction ou de revêtement de mur ou de sol et des peintures et vernis sur leurs émissions de polluants volatils

Pollutant \ Country	N° CAS	France	Germany	NL*	UK**	Italy	Hungary	Mexico	Estonia	Belgium	Argentina	Austria	Denmark	Spain	Ireland	USA	Australia	New Zeland	Switzerland	Canada
Formaldehyde	50-00-0	0.6	0.37	0.15	2.5	-	0.6	-	0.6	-	-	0.6	0.4	0.37	2.5	1	1.2	0.6	0.37	0.36
Benzene	71-43-2	3.25	1.9	3.25	3.25	3.25	3	3.2	1.5	3.25	1.6	3.2	1.6	3.25	3	25	3.2	3.2	1.6	1.6
Naphtalene	91-20-3	50	0.5	50	-	-	-	50	50	53	52	50	50	53	50	50	52	52	50	52
Trichloroethylene	79-01-6	405	60	-	550	-	270	535	50	273	268	33	55	273	54	536	54	269	260	54
Tetrachloroethylene	127-18-4	138	138	-	345	-	50	670	70	172	170	345	70	172	170	680	340	335	345	170
Acetaldehyde	75-07-0	180	91	37	37	-	25	-	45	46	-	90	45	-	45	360	36	36	90	-
Toluene	108-88-3	76.8	190	150	191	192	190	188	192	192	188	190	94	192	192	753	191	188	190	75
Xylene	95-47-6 108-38-3 106-42-3	221	-	210	220	221	221	435	221	221	434	221	109	221	221	-	-	217	-	434
Styrene	100-42-5	100	86	-	430	-	50	215	90	216	85	85	105	86	85	425	213	213	85	-
1,2,4-trimethylbenzene	95-63-6	100	100	100	125	100	-	-	100	-	-	100	100	100	100	-	-	-	-	-
1,4-dichlorobenzene	106-46-7	4.5	6	150	153	122	122	450	122	61	60	122	60	122	122	450	150	153	122	60
Ethylbenzene	100-41-4	88.4	88	215	441	442	442	435	442	442	434	440	217	441	442	435	434	434	220	87
2-butoxyethanol	111-76-2	49	49	100	123	98	98	120	98	98	97	98	98	98	98	240	97	121	49	97
Acrolein	107-02-8	-	0.2	-	0.23	-	0.23	0.25	0.2	0.23	-	0.25	0.12	0.23	0.25	0.25	0.23	0.23	0.25	-
α-pinene	80-56-8	-	-	-	-	-	-	-	150	111	-	-	-	-	-	-	-	-	-	111
Limonene	5989-27-5 5989-54-8 138-86-3	-	-	-	-	-	-	-	-	-	-	-	390	-	-	-	-	-	40	-
Hexanal	66-25-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
delta-3-carene	13466-78-9	-	-	-	-	-	-	-	150	111	-	-	-	-	-	-	-	-	-	111
TVOC		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO_2	10102-44-0	-	-	0.4	-	-	9	6	4	5.7	5.6	6	4	5.7	5	30	5.6	5.6	6	-
CO	630-08-0	55	-	29	35	-	33	55	40	29	29	33	29	29	23	9	34	27	35	29
PM 2.5	-	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM10	-	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	-	-

* Netherlands
**United Kingdom

Table 1: Concentration values threshold for professional long time exposure (mg/m^3)

Country / Pollutant	N° CAS	France	NL*	UK**	Italy	Hungary	Mexico	Estonia	Belgium	Argentina	Austria	Spain	Ireland	USA	Australia	New Zeland	Switzerland	Canada
Formaldehyde	50-00-0	1.2	0.5	2.5	-	0.6	3	1.2	0.38	0.4	0.6	-	2.5	2.5	2.5	1.2	0.74	1.2
Benzene	71-43-2	-	-	-	-	-	16	9	-	8	12.8	-	-	-	-	8	-	8
Naphtalene	91-20-3	-	80	-	-	-	75	-	80	79	-	80	75	-	79	79	-	79
Trichloroethylene	79-01-6	108	-	820	-	540	1080	140	545	536	132	-	134	1072	216	1070	520	134
Tetrachloroethylene	127-18-4	275	-	689	-	50	1340	170	695	679	1380	689	678	1360	1020	1005	690	679
Acetaldehyde	75-07-0	-	92	92	-	25	45	90	-	45	90	46	45	-	91	90	90	45
Toluene	108-88-3	384	384	384	-	380	-	384	384	-	380	384	384	1129	574	-	760	-
Xylene	95-47-6 108-38-3 106-42-3	442	442	441	442	442	635	442	442	650	442	442	442	-	-	-	-	650
Styrene	100-42-5	-	-	1080		50	425	200	432	170	340	172	170	851	426	426	170	-
1,2,4-trimethylbenzene	95-63-6	250	200	-	-	100	-	-	-	-	150	-	-	-	-	-	-	-
1,4-dichlorobenzene	106-46-7	306	300	306	300	306	675	306	306	-	306	306	306		300	306	-	-
Ethylbenzene	100-41-4	442	430	552	884	884	545	884	551	542	880	884	884	-	543	543	220	-
2-butoxyethanol	111-76-2	246	246	246	246	246	360	246	246	-	200	245	246	-	242	-	98	-
Acrolein	107-02-8	0.25	-	0.7	-	0.23	0.8	0.7	0.7	0.2	0.25	0.69	0.8	-	0.69	-	0.25	0.23
α-pinene	80-56-8	-	-	-	-	-	-	300	-	-	-	-	-	-	-	-	-	-
Limonene	5989-27-5 5989-54-8 138-86-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80	-
Hexanal	66-25-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
delta-3-carene	13466-78-9	-	-	-	-	-	-	300	-	-	-	-	-	-	-	-	-	-
TVOC		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NO_2	10102-44-0	6	1	-	-	9	10	10	9.5	9.4	12	9.6	9	-	9.4	9.4	6	1.9
CO	630-08-0	100	-	232	-	66	400	120	-	-	66	-	115	35	-	230	70	115
PM 2.5	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PM10	-	0.05	-	-	-	-	-	-	-	-	-	-	-	0.15	-	-	-	-

* Netherlands
**United Kingdom

Table 2: Concentration values threshold for professional short time exposure (mg/m^3)

Pollutant \ Organization	N° CAS	Netherlands	Germany (AGOEF)		WHO		Europe		ANSES (France)		Etiquetage A+
		Long time	Short time	Long time	Short time	Long time	Short time	Long time	Short time	Long time	
Formaldehyde	50-00-0	12	100	30	100 (30min)	-	100 (30min)	30	50 (2h)	10	10
Benzene	71-43-2	20	-	-	-	1.7	No safe level	No safe level	30 (1-14 days)	2	-
Naphtalene	91-20-3	25	30	10	-	10	-	10	-	10	-
Trichloroethylene	79-01-6	200	-	-	-	23	No safe level	No safe level	800	20	-
Tetrachloroethylene	127-18-4	250	-	-	-	250	8 000 (30 min)	250 (annual)	1 380 (1-14 days)	250	250
Acetaldehyde	75-07-0	-	1 000	100	-	-	-	-	3000 (1h)	160	200
Toluene	108-88-3	-	3 000	300	-	-	1 000 (30 min)	260	-	-	300
Xylene	95-47-6 108-38-3 106-42-3	870	60	20	-	-	-	-	-	-	200
Styrene	100-42-5	900	300	30	-	-	260 (30 min)	70 (Weekly)	-	-	200
1,2,4-trimethylbenzene	95-63-6	-	1 000	100	-	-	-	-	-	-	1 000
1,4-dichlorobenzene	106-46-7	670	-	-	-	-	-	-	-	-	60
Ethylbenzene	100-41-4	770	2 000	200	-	-	-	-	-	-	750
2-butoxyethanol	111-76-2	-	1 000	100	-	-	-	-	-	-	1000
Acrolein	107-02-8	-	-	-	-	-	-	-	6.9 (1h)	0.8	-
α-pinene	80-56-8	-	2 000	200	-	-	-	-	-	-	-
Limonene	5989-27-5 5989-54-8 138-86-3	-	10 000	1 000	-	-	-	-	-	-	-
Hexanal	66-25-1	-	2 000	100	-	-	-	-	-	-	-
delta-3-carene	13466-78-9	-	2 000	200	-	-	-	-	-	-	-
TVOC		-	-	-	-	-	-	-	-	-	1 000
NO_2	10102-44-0	200	350	60	200 (1h)	40 (1year)	200 (1h)	40 (Annual)	200 (1h)	20	-
CO	630-08-0	1000	-	-	100 000 (15min)	7 000 (24h)	35 000 (1h)	7 000 (24h)	100 000 (15min)	10 000 (8h)	-
PM 2.5	-	24	-	-	25	10	25 (24h)	10 (Annual)	25	10	-
PM10	-	50	-	-	50	20	50 (24h)	20 (Annual)	50	20	-

Table 3: Guidelines concentrations values threshold for short time and longtime exposure (µg/m^3)

As the analyzer should be able to analyze the indoor air quality in all the countries, for each pollutant, the limit of detection of the analyzer should be below the most restrictive threshold value. The table 4 gives the most restrictive value for each selected pollutant:

Pollutant name	Concentration treshold: long time exposure ($\mu g/m^3$)	Concentration treshold: short time exposure ($\mu g/m^3$)
Formaldehyde	10	30
Benzene	1.7	30
Naphtalene	10	30
Trichloroethylene	20	800
Tetrachloroethylene	250	1.380
Acetaldehyde	100	200
Toluene	300	3.000
Xylene	20	60
Styrene	30	300
1,2,4-trimethylbenzene	100	1.000
1,4-dichlorobenzene	60	300.000
Ethylbenzene	200	2.000
2-butoxyethanol	100	1.000
Acrolein	0.8	6.9
α-pinene	200	2.000
Limonene	1.000	10.000
TVOC	1.000	2.000
NO_2	20	200
CO	7.000	30.000
PM 2.5	10	25
PM10	20	50

Table 4: Worldwild minimum concentration treshold value for the selected pollutants

Other than the pollutants, it has been proven that other parameters could affect the occupants' health. It is the case for the temperature and relative humidity. These parameters also have a role in the development of moisture impacting strongly human health. Besides, the CO_2 should be assessed as it is a good indicator of the air confinement and it has be proven that the air confinement will impact the human health and productivity. All of these parameters should also be assessed by the analyzer.

5 Analyzer performance

The list of pollutant followed during the IAQ test with the Blue X-FLR8 Analyzer had to be refined by taking into account its limit of detection for each pollutant.

For now, among the parameters other than pollutants, the Blue X-FLR8 Analyzer can measure the CO_2 concentration and the absolute water concentration value. However, it cannot measure the temperature and the pressure. In consequence, it cannot give the relative humidity value.

Among the selected pollutants, the Blue X-FLR8 Analyzer cannot assess all the pollutants because its detection limit is too high or the pollutant spectrum is not reachable (see table 5). The limits of detection are stated for 10s of measurement for one gas. They do not take into account the potential cross-talk from other compounds.

Pollutant name	Concentration treshold: long term exposure (µg/m^3)	Blue X-FLR8 Limit of detection (µg/m3)	Potential target compound
Formaldehyde	**10**	**9**	**YES**
Benzene	1.7	125	NO
Naphtalene	10	91	NO
Trichloroethylene	20	528	NO
Tetrachloroethylene	250	28000	NO
Acetaldehyde	**100**	**94**	**YES**
Toluene	**300**	**146**	**YES**
Xylene	20	150	NO
Styrene	30	189	NO
1,2,4-trimethylbenzene	100		NO
1,4-dichlorobenzene	60	2092	NO
Ethylbenzene	**200**	**82**	**YES**
2-butoxyethanol	**100**	**52**	**YES**
Acrolein	0.8	125	NO
α-pinene	**200**	**31**	**YES**
Limonene	**1.000**	**63**	**YES**
TVOC	1.000		NO
NO_2	20	93	NO
CO	7.000		NO
PM 2.5	10		NO
PM10	20		NO

Table 5: Blue X-FLR8 Analyzer detection limit vs pollutant threshold

Finally, for now, the concentration of the following compounds can be monitored by the Blue X-FLR8 Analyzer:

- the formaldehyde,
- the acetaldehyde,
- the toluene,
- the ethylbenzene,
- the 2-butoxyethanol,
- the α-pinene,
- the limonene,
- the CO_2.

However, it is planned to integrate new modules/sensors to the analyzer in order to increase number of parameters monitored during the IAQ test. More especially, it is planned to integrate sensors in order to measure the temperature, the relative humidity, and the fine particles concentration. Moreover, commercial apparatus can measure these parameters and can be used in the pilot test phase. In consequence, we decided to keep the following paramaters in the list of measured parameters:

- the temperature
- the realtive humidity
- the fine particulates concentrations.

Although this new list is not as extensive as the one established in the preliminary phase, the different categories of parameters are all represented: outdoor pollutant, indoor pollutants, confinement, and comfort. The measurement of these parameters is then sufficient to qualify the IAQ and to find the pollution source if there is any IAQ problem.

6 Indicators and indexes

6.1 Parameters organization

The parameters can be divided in different categories and sub categories depending on their source/ nature. Indeed, the temperature and the relative humidity will not impact the human health the same way as indoor pollutants. These two parameters will then be placed in a category that we will call "comfort".

Also, although the CO_2 is an indoor air pollutant, it is only dangerous above very high concentration that are never reached. However, it has a direct impact on the productivity of the people in the room. Also, it is produced by human activity, so it can give an information on the air renewal in the room and the efficiency of the ventilation system. We will then treat the CO_2 separately and we will call this category "confinement".

Finally, for the third category (pollution) we also decided to divide the remaining pollutants in two sub-categories depending on their sources: indoor or outdoor. Indeed, by separating these two categories, it will be possible to identify quickly the origin of the pollution, and to see which component of the building has to be checked (filtration system, construction materials, etc.).

The schematic representation of the indicators tree structure is given in the Figure 1, where all the parameters have been classified.

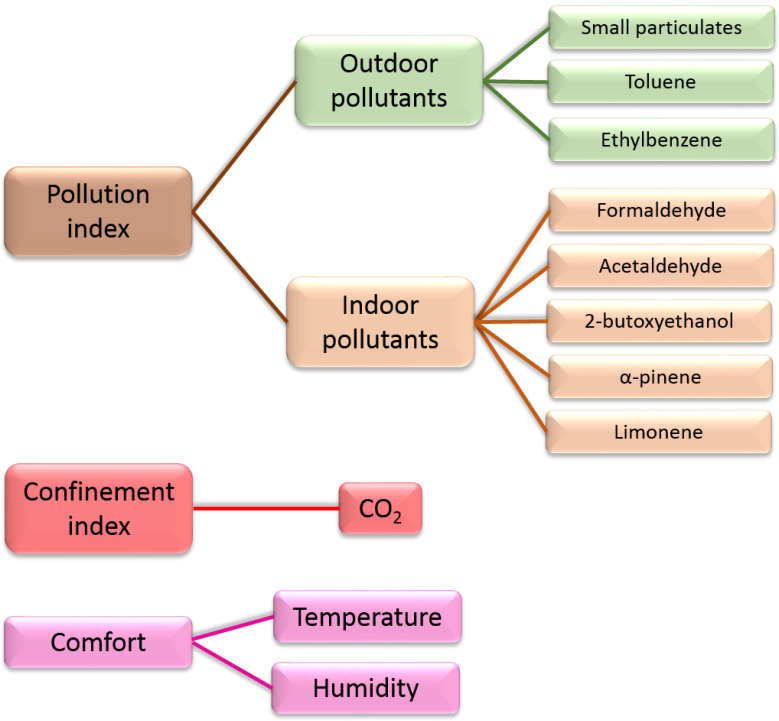

Figure 1: Schematic reprsentation of the indicators tree structure

6.2 Indexes/ indicators

6.2.1 Pollution indexes

6.2.1.1 Literature

In the literature, we can find several types of indexes (group indicators) that have been built from these indicators. The OQAI presented a review of these indexes which is quite complete.[28] The indexes can be classified in different categories. A first category of group indicators is calculated from data collected in the field. For this category of indexes, the pollutant concentration is generally compared to the values measured in a panel of buildings.

It is the case of the "Indoor Air Pollution Index" (IAPI)[29] which formula is:

$$IAPI = \frac{1}{I}\sum_{i=1}^{I}\frac{1}{J}\sum_{j=1}^{J}\frac{1}{K}\sum_{k=1}^{K}10\left[1-\frac{C_{i,j,k}^{\max}-C_{i,j,k}^{obs}}{C_{i,j,k}^{\max}-C_{i,j,k}^{\min}}\left(\frac{C_{i,j,k}^{dmc}-C_{i,j,k}^{obs}}{C_{i,j,k}^{dmc}}\right)\right]$$

For $C^{max} > C^{obs}$ and $C^{dmc} > C^{obs} > C^{min}$

Where *I* is the number of level-3 groups in the IAPI tree structure, $I = 2$; *J* is the number of level-2 groups in each level-3 group, $J = 2$; *K* is the number of level-1 pollutant variables in each level-2 group, $K = 2$; *max* is the maximum measured concentration; *min* is the minimum measured concentration; *dmc* is the demarcation concentration; *obs* is the measured concentration in the subject building. The problem of this type of index is that they are based on the results obtain on the IAQ measured in existing buildings. In consequence, if all the buildings of the study presented bad IAQ, even a polluted building could present a good index.

The second category of indexes that we can find in the literature are the ones based on pollutants guide values. This type of indexes sums the ratios ($pollutant_n$) / ($pollutant_n$ guide value) which is divided (or not) by the number of pollutants taken into account in the sum. This is the case of the index CLIM 2000 which has been set by Electricité de France (EDF), and the index LHVP which has been elaborated by le Laboratoire d'Hygiène de la Ville de Paris (L.H.V.P).

$$I_{CLIM} = \frac{1}{4}\left(\frac{CO_2}{4500}+\frac{CO}{30}+\frac{NO_2}{0,4}+\frac{HCHO}{0,06}\right) \qquad I_{LHVP} = \frac{CO}{5}+\frac{CO_2}{1000}+\frac{DTB}{1000}$$

There are several issues of using this type of indexes. First of all, they do not possess a ponderation of the pollutants and assume that all the pollutants have the same impact on the air pollution which is not true. Secondly, they assume that a "cocktail" of pollutants is more harmful than a single pollutant. However, this last point is still under debate and no clear conclusion has been drawn yet. In consequence, this type of indexes does not seem to be the most judicious to use in our case.

The third category of indexes is an evolution of the second category as it is based on the same principle except that some pollutants count more than other depending in their harmfulness. A

$$Ip = (3 \times I_{CO} + 3 \times I_{NO2} + 6 \times I_{PM10}) / 12$$

[28] OQAI, Elaboration d'indices de la qualité de l'air intérieur- Phase 1: Inventaire des indices disponibles

[29] D.J. Moschandreas & S.C. Sofuoglu, *Journal of the Air & Waste Management Association*, **2004**, Vol.54, p.1440-1451.

ponderation factor is then applied in the formula. This is the case of the Paris airport pollution index which estimate the contribution of PM10 over the ones of CO and NO_2.

Among this category, we can also cite the GAPI[30] index which sums weighted pollutant concentration values. Here, the ponderation is made by the factor W_i which is calculated according to the impact of the pollutant on human health (carcinogenic power, number of risk sentences listed in the INRS data sheet, etc.). This index can only be used to follow the evolution of the IAQ but is not relevant for the characterization of the IAQ as it is not calculated as an average but just a sum of the different pollutants present in the room. In consequence, it can vary a lot from one building to another.

$$GAPI = \sum_i W_i \, C_i$$

As the index from the second category, these indexes suffers from the same drawbacks which is the addition of the pollutant effects, among others. However, installing a hierarchy between the pollutants according to their impact on human health appears very relevant to the IAQ issues. In consequence, it will be retained for the establishment of an index within the project.

The fourth indexes category is based on the analysis of the pollutants concentration independently from one another. The air quality evaluation will be based on the pollutant which presents the highest concentration compared to its reference value. Among these indexes, we can cite the BILGA index[31].

$$I_{BILGA} = \max [IAQ(P, T)] \qquad IAQ(P,T) = \frac{E^P_{moy} - VRL^P_T}{VRI^P_T - VRL^P_T}$$

E^P_{moy} is the average exposure to the pollutant P for an exposure time T
VRL^P_T is the limited risk value of the pollutant P for an exposure time T
VRI^P_T is the important risk value of the pollutant P for an exposure time T
The index is defined as follow:
If I BILGA < 0, the IAQ is excellent,
If I BILGA = 0, the health risk is insignificant in the building,
If 0 < I BILGA < 1, the health risk encountered by the occupants is limited,
I BILGA > 1, the health risk is inacceptable.

This type of indexes is coherent with the evaluation of the IAQ during the different construction phases. However, the reference value used to calculate this index is the important risk value for which the occupants risk severe health damages. Then it cannot be used to evaluate moderate risks like the one for long term exposure, or even for the detection of pollution sources as the detection of such levels will imply the person to leave the room. This index is much more pertinent for

[30] S. Cariou & J.M. Guillot, "Utilisation d'un indice global de la qualité de l'air intérieur pour suivre l'ensemble des COV présents et leur impact sur la santé humaine", *Air Pur*, **2005**, n°69.

[31] M. Cohas, **1994**, Contribution à l'amélioration de la qualité de l'air intérieur des locaux d'habitation. Thèse de doctorat de l'Université Pierre et Marie Curie, Paris VI, p.210

detection of anomalies during the use of the building after the construction, or for workers safety for example.

6.2.1.2 Chosen pollution indicators and display

Regarding the literature, we can notice that all of the indexes presented in the previous paragraph present benefits and drawbacks but, overall, none of them fully satisfy our requirements. In consequence, we chose to use new indexes that are based on the ones of the last category. Indeed, as the cocktail effect is still under debate for the moment, it seemed relevant to choose an index which takes into account the contribution of the pollutants separately instead of an index which sums the pollutants effects. However, unless the indexes proposed in the literature, we decided to compare the pollutant concentration value to the threshold value given for long term exposition and for short term exposition.

As the regulation is different in every country, the threshold value will be different in each country. The threshold value chosen for each pollutant will be the most restrictive value among the one given by the national legislation, the one given by the national agency, and the one given by international agencies such as WHO. If there is no value in the national regulation or in national or international agencies documents, the threshold value used will be the most restrictive value that has been set by the different EU countries.

The tables 6 and 7 summarize the guide values given by the national regulation of the countries and by the national and international agencies that will be used to determine the pollutant thresholds in each country for the selected pollutants.

Pollutant \ Country	N° CAS	France	NL*	UK**	Italy	Spain	Ireland	Germany (AGOEF)	WHO	Europe	ANSES (France)
Formaldehyde	50-00-0	1.2	0.5	2.5	-	-	2.5	0.1	0.1 (30min)	0.1 (30min)	0.05 (2h)
Acetaldehyde	75-07-0	-	92	92	-	46	45	1	-	-	3 (1h)
Toluene	108-88-3	384	384	384	-	384	384	3	-	1 (30 min)	-
Ethylbenzene	100-41-4	442	430	552	884	884	884	2	-	-	-
2-butoxyethanol	111-76-2	246	246	246	246	245	246	1	-	-	-
α-pinene	80-56-8	-	-	-	-	-	-	2	-	-	-
Limonene	5989-27-5 5989-54-8 138-86-3	-	-	-	-	-	-	10	-	-	-
PM 2.5	-	0.025	-	-	-	-	-	-	0.025	0.025	0.025
PM10	-	0.05	-	-	-	-	-	-	0.05	0.05	0.05

Table 6: Guidelines values for short term exposition (mg/m^3)

Country / Pollutant	N° CAS	France	Germany	NL*	UK**	Italy	Spain	Ireland	Germany (AGOEF)	WHO	Europe	ANSES (France)	NL* agency
Formaldehyde	50-00-0	0.6	0.37	0.15	2.5	-	0.37	2.5	0.03	-	0.03	0.01	0.012
Acetaldehyde	75-07-0	180	91	37	37	-	-	45	0.1	-	-	0.16	-
Toluene	108-88-3	76.8	190	150	191	192	192	192	0.3	-	0.26	-	-
Ethylbenzene	100-41-4	88.4	88	215	441	442	441	442	0.2	-	-	-	0.77
2-butoxyethanol	111-76-2	49	49	100	123	98	98	98	0.1	-	-	-	-
α-pinene	80-56-8	-	-	-	-	-	-	-	0.2	-	-	-	-
Limonene	5989-27-5 5989-54-8 138-86-3	-	-	-	-	-	-	-	1	-	-	-	-
PM 2.5	-	0.01	-	-	-	-	-	-	-	0.01	0.01	0.01	0.024
PM10	-	0.02	-	-	-	-	-	-	-	0.02	0.02	0.02	0.05

Table 7: Guidelines values for long term exposition (mg/m^3)

Depending on the indoor air quality, the color of the indicator could be either green, or orange, or red:

- If the measured value is below the threshold value for long term exposition, the indicator will appear as green,
- If the measured value is above the threshold value for long term exposition and below the threshold value for short term exposition, the indicator will appear as orange,
- And if the measured value is above the threshold value for short term exposition, the indicator will appear as red.

The group indicator will reflect the worse result obtained for the individual indicators of the group:

- If among the individual indicators one is red, all the group indicators above will be red,
- If none of the indicators is red but one is orange, all the group indicators above will be orange,
- If all the indicators are green, all the group indicators above will be green.

6.2.2 Confinement indexes

As explained in the section 4, we decided to exclude the CO_2 from the pollution index as it is not really harmful for human health unless reaching huge concentrations (>10,000ppm) that are never reached in normal usage. Besides, it can give useful information about the ventilation of the room as it is directly linked to human activity (cooking, breathing, etc.). In consequence, it is related to the confinement of the air in the room, and that is why this index is called "confinement index".

It has been proven that although CO_2 is not harmful for human health, it impacts directly the productivity of the occupants. Generally, the air is estimated as confined if the CO_2 concentration value is above 1,000ppm[32], and very confined if its concentration value reaches 1,400ppm (1,000ppm above the outdoor concentration value). We will then take these two values as reference in our project. In consequence, the

[32] ASHRAE, 2013, Standard 62.1- Ventilation for Acceptable Indoor Air Quality (ANSI Approved)

indicator will appear as green if C_{CO2}< 1,000ppm, as orange if 1,000ppm < C_{CO2} < 1,400ppm, and as red if C_{CO2} > 1,400ppm.

6.2.3 Comfort indexes

Comfort is complicated to assess as it strongly depends of the person physiology. There are numerous indexes that have been defined which are more or less complex. They can rely on several parameters such as the weight and the size of a person, the flux of air exchanged between a person and its environment, the ventilation of the room, etc. Although all these indexes are very interesting in their approach, they are very complex to use in our project as it would require a deep knowledge of the further usage of the building and it would need to adapt the analyzer to each case. As the goal of the project is to define a simple methodology that can be applied to the widest types of buildings, we decided to use a much simpler model.

Some studies showed that the indoor atmosphere is perceived as comfortable for most of the people when the temperature (T) is comprised between 22.8 to 26.1°C in the summer and 20.0 to 23.6°C in the winter, and the relative humidity (RH) is comprised between 30% and 65%. Some abacus have been established to draw comfort zone for winter and summer period (ASHRAE, standard 55)[33].

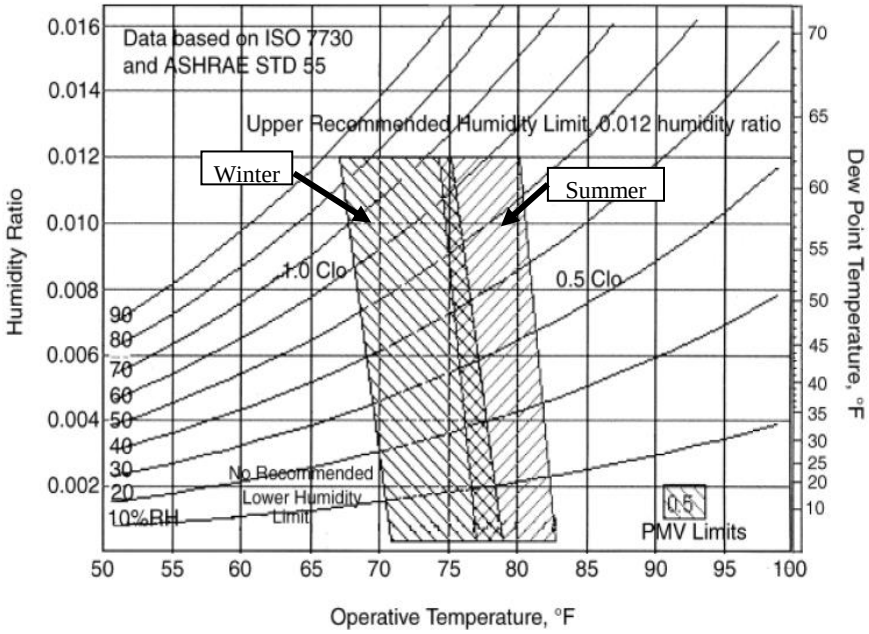

Figure 2: Abacus reflecting the seasonal confort zones depending on T and RH

We decided to use the values described below to determine the indoor comfort:

- If the temperature is comprised between 20.5°C and 24°C, the indicator will be green, if the value is one degree above or one degree below this range, it will be orange, and it will be red otherwise,
- If the relative humidity is comprised between 40% and 60%, the indicator will be green, if the RH id comprised between 30% and 40% or between 60 and 65%, the indicator will be orange, and it will be red otherwise.

[33] ASHRAE, **2013**, Standard 55 - Thermal Environmental Conditions for Human Occupancy

However, the rules stated above about the group indicator color will be true for all the indicators except for the temperature. Indeed, as this parameter will depend a lot on the occupant behavior and on the heating power, it did not seem relevant to qualify the IAQ as bad if the temperature is too low or too high as it can be adjusted manually later on. In consequence, we will only display its value and its color for analysis but it will not affect the status/ color of the group indicators above.

7 Conclusion

In this deliverable, we explained first the current IAQ issue context. Then, in a first part, we presented the exiting regulation and the guide values that were given by national and international agencies. From these documents, we selected a list of pollutants that we aimed to follow with the IAQ analyzer in order to assess the IAQ. The threshold values for these pollutant were gathered in the tables 2 and 3 from which we could determine the worldwide minimum threshold value for each pollutant (table 4). By comparing these values to the detection limits of the Blue X-FLR8 analyzer for each pollutant, we then refined the list of pollutants that will be followed during the pilot test. Finally, the parameters that will be assessed by the Blue X-FLR8 analyzer (and with a commercial analyzer during the first stage) are:

- the formaldehyde,
- the acetaldehyde,
- the toluene,
- the ethylbenzene,
- the 2-butoxyethanol,
- the α-pinene,
- the limonene,
- the CO_2,
- the temperature
- the realtive humidity
- the fine particulates concentrations.

In a third part, we also established an inventory of the existing indexes. We concluded that none of the indexes listed fully satisfy our requirements. Finally, in our work, we decided to set individual indicators for each pollutant. Depending on the measured value compared to different threshold values, the color of the indicator will be either green, or orange, or red. These parameters are gathered in different groups depending on their origin (pollution source or ventilation issues) and their impact on human health. The color of the group indicator (index), will be the same that the most unfavorable indicator of the group. The tree structure of the indicators that will be used by the analyzer is given in Figure 1 (p.17).

Finally, the models of report set for the countries from which the partners are from are given in Annex 1. In this annex, we can find the threshold values that have been determined for each country.

Annex 1:Report models for the EU countries from which the partners are from

➢ France

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		10	50	Ethylbenzene		88 400	442 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		160	3 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		49 000	246 000	PM 2.5		10	25								
α-pinene		200	2 000	PM 10		20	50								
Limonene		1 000	10 000												

➢ Germany

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		30	100	Ethylbenzene		200	2 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		100	1 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		100	1 000	PM 2.5		25	25								
α-pinene		200	2 000	PM 10		50	50								
Limonene		1 000	10 000												

➢ Netherland

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		12	100	Ethylbenzene		770	430 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		37 000	92 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		100 000	246 000	PM 2.5		10	25								
α-pinene		200	2 000	PM 10		20	50								
Limonene		1 000	10 000												

➢ United Kingdom

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		30	100	Ethylbenzene		441 000	552 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		37 000	92 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		123 000	246 000	PM 2.5		10	25								
α-pinene		200	2 000	PM 10		20	50								
Limonene		1 000	10 000												

➢ Italy

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		30	100	Ethylbenzene		442 000	884 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		100	1 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		98 000	246 000	PM 2.5		10	25								
α-pinene		200	2 000	PM 10		20	50								
Limonene		1 000	10 000												

➢ Spain

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Pollutant	$C_{measured}$ ($\mu g/m^3$)	C_{max1} ($\mu g/m^3$)	C_{max2} ($\mu g/m^3$)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		30	100	Ethylbenzene		441 000	884 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		100	46 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		98 000	245 000	PM 2.5		10	25								
α-pinene		200	2 000	PM 10		20	50								
Limonene		1 000	10 000												

➢ Ireland

IAQ Index

Pollution index								Confinement index				Comfort index			
Indoor pollutants				Outdoor pollutants											
Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Pollutant	$C_{measured}$ (µg/m³)	C_{max1} (µg/m³)	C_{max2} (µg/m³)	Parameter	Measured Value	Slight inconfort range	Incomfort range
Formaldehyde		30	100	Ethylbenzene		442 000	884 000	CO_2		1000	1400	T		19.5 – 20.5 or 24-25	<19.5 or >25
Acetaldehyde		45 000	45 000	Toluene		260	1 000					RH		40%>HR> 30% OR 65%>HR> 60%	< 30% Or >65%
2- butoxyethanol		98 000	246 000	PM 2.5		10	25								
α-pinene		200	2 000	PM 10		20	50								
Limonene		1 000	10 000												

Annex 2: Work/Occupational exposure limits of EU country from which the partners are from

➢ France[34]

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m-3	ppm	mg.m-3				
Acétate de n-amyle → Acétate de pentyle									
Acétate de sec-amyle → Acétate de 1-méthylbutyle									
Acétate de 2-butoxyéthyle	**112-07-2**	**10**	**66,5**	**50**	**333**	***, (12)**	**84**	**126**	**2012**
Acétate de n-butyle	123-86-4	150	710	200	940	—	84	31	1983
Acétate de sec-butyle	105-46-4	200	950	—	—	—	84	—	1987
Acétate de tert-butyle	540-88-5	200	950	—	—	—	84	—	1987
Acétate de 2-éthoxyéthyle	**111-15-9**	**2**	**11**	**—**	**—**	***, R1B**	**84**	**71**	**2012**
Acétate d'éthyle	141-78-6	400	1400	—	—	—	84	18	1983
Acétate d'éthylglycol → Acétate de 2-éthoxyéthyle									
Acétate de sec-hexyle	108-84-9	50	300	—	—	—	84	—	1987
Acétate d'isobutyle	110-19-0	150	710	200	940	—	84	124	1983
Acétate d'isopentyle	**123-92-2**	**50**	**270**	**100**	**540**	**—**	**84**	**175**	**2007**
Acétate d'isopropyle	108-21-4	250	950	300	1140	—	84	107	1983
Acétate de 2-méthoxyéthyle	**110-49-6**	**1**	**5**	**—**	**—**	***, R1B**	**84**	**131**	**2012**
Acétate de 2-méthoxy-1-méthyléthyle	**108-65-6**	**50**	**275**	**100**	**550**	*****		**221**	**2007**
Acétate de méthyle	79-20-9	200	610	250	760	*	84	88	1983
Acétate de méthylglycol → Acétate de 2-méthoxyéthyle									
Acétate de 1-méthylbutyle	**626-38-0**	**50**	**270**	**100**	**540**			**175**	**2007**
Acétate de pentyle	**628-63-7**	**50**	**270**	**100**	**540**			**175**	**2007**
Acétate de 3-pentyle	**620-11-1**	**50**	**270**	**100**	**540**			**175**	**2004**
Acétate de n-propyle	109-60-4	200	840	—	—	—	84	107	1987
Acétate de vinyle	**108-05-4**	**5**	**17,6**	**10**	**35,2**	**—**	**—**	**295**	**2012**
Acétone	**67-64-1**	**500**	**1210**	**1000**	**2420**	**—**	**84**	**3**	**2007**
Acétonitrile	**75-05-8**	**40**	**70**	**—**	**—**	*****	**84**	**104**	**2007**
Acide acétique	64-19-7	—	—	10	25	—	—	24	1982
Acide acrylique	79-10-7	2	6	10	30	—	—	233	1996
Acide bromhydrique	**10035-10-6**			**2**	**6,7**				**2004**
Acide chlorhydrique → Chlorure d'hydrogène									
Acide chromique → Chrome hexavalent et ses composés									
Acide cyanhydrique (1)	**74-90-8**	**2**	**2**	**10**	**10**	*****	—	4	**2007**
Acide 2,4-dichlorophénoxyacétique → 2,4-D									
Acide 2,2-dichloropropionique	75-99-0	1	6	—	—	—	—	—	1987
Acide fluorhydrique → Fluorure d'hydrogène									
Acide formique	**64-18-6**	**5**	**9**	**—**	**—**	**—**	**—**	**149**	**2007**
Acide méthacrylique	79-41-4	20	70	—	—	—	—	—	1987
Acide nitrique	**7697-37-2**	**—**	**—**	**1**	**2,6**	**—**	**—**	**9**	**2007**
Acide oxalique	**144-62-7**	**—**	**1**	**—**	**—**	**—**	**—**	**110**	**2007**
Acide phosphorique	**7664-38-2**	**0,2**	**1**	**0,5**	**2**	**—**	**—**	**37**	**2004**
Acide picrique	88-89-1	—	0,1	—	—	*	—	—	1987
Acide propionique	**79-09-4**	**10**	**31**	**20**	**62**	**—**	**—**	**—**	**2004**
Acide sulfurique	**7664-93-9**	**—**	**0,05t**	—	3	**(11)**	**—**	**30**	**2012**
Acide thioglycolique	68-11-1	1	5	—	—	*	—	262	1987
Acide trichloroacétique	76-03-9	1	5	—	—	—	—	—	1987
Acide 2,4,5-trichlorophénoxyacétique → 2,4,5-T									
Acroléine	107-02-8	—	—	0,1	0,25	—	—	57	1982
Acrylamide	79-06-1	0,1	0,3	—	—	*, C1B, M1B, R2	—	119	1995

[34] INRS : L'institut national de Recherche et de Sécurité, **2016**, "Valeurs limites d'exposition professionnelle aux agents chimiques en France" Available at: http://www.inrs.fr/media.html?refINRS=ED%20984 [accessed the 23rd of December, 2016]

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Acrylate de n-butyle	**141-32-2**	**2**	**11**	**10**	**53**	**—**	**65**	**—**	**2004**
Acrylate d'éthyle	**140-88-5**	**5**	**21**	**10**	**42**	**—**	**65**	**185**	**2012**
Acrylate de 2-hydroxypropyle	999-61-1	0,5	3	—	—	*	65	—	1987
Acrylate de méthyle	**96-33-3**	**5**	**18**	**10**	**36**	**—**	**65**	**181**	**2012**
Acrylonitrile	107-13-1	2	4,5	15	32,5	C1B	—	105	1986
Alcool allylique	**107-18-6**	**0,2**	**0,48**	**2**	**4,8**	*	**84**	**156**	**2004**
Alcool n-butylique	71-36-3	—	—	50	150	—	84	80	1982
Alcool sec-butylique	78-92-2	100	300	—	—	—	84	—	1982
Alcool tert-butylique	75-65-0	100	300	—	—	—	84	—	1982
Alcool 2-chloroéthylique → Ethylène chlorhydrine									
Alcool éthylique	64-17-5	1000	1900	5000	9500	—	84	48	1982
Alcool furfurylique	98-00-0	10	40	—	—	*, C2	74, 84	160	1987
Alcool isoamylique	123-51-3	100	360	—	—	—	84	206	1987
Alcool isobutylique	78-83-1	50	150	—	—	—	84	117	1982
Alcool isooctylique	26952-21-6	50	270	—	—	*	84	—	1987
Alcool isopropylique	67-63-0	—	—	400	980	—	84	66	1982
Alcool méthylique → méthanol	67-56-1								
Alcool propargylique	107-19-7	1	2	—	—	*	84	—	1987
Alcool n-propylique	71-23-8	200	500	—	—	—	84	211	1982
Aldéhyde acétique	75-07-0	100	180	—	—	C2	—	120	1987
Aldéhyde 2-buténoïque trans	123-73-9	2	6	—	—	M2	—	—	1987
Aldéhyde chloroacétique	107-20-0	—	—	1	3	C2	—	—	1987
Aldéhyde crotonique → Aldéhyde 2-buténoïque trans									
Aldéhyde formique	50-00-0	0,5	—	1	—	C1B, M2, (7)	43, 43bis	7	1993
Aldéhyde furfurylique	98-01-1	—	—	2	8	C2	74, 84	40	1982
Aldéhyde glutarique	111-30-8	0,1	0,4	0,2	0,8	—	65, 66	171	1996
Aldéhyde n-valérique	110-62-3	50	175	—	—	—	—	—	1987
Aldrine	309-00-2	—	0,25	—	—	*, C2	65	—	1987
Aluminium (composés alkylés)	—	—	2	—	—	—	—	—	1987
Aluminium (fumées de soudage)	—	—	5	—	—	—	—	306	1987
Aluminium (métal)	7429-90-5	—	10	—	—	—	—	306	1985
Aluminium (pulvérulent)	7429-90-5	—	5	—	—	—	—	306	1987
Aluminium (sels solubles)	—	—	2	—	—	—	—	306	1985
Aluminium (trioxyde de di-)	1344-28-1	—	10	—	—	—	—	306	1985
Amiante			**Cf § 2. 2. 1 ED 984**			**C1**	**30, 30bis**	**145**	**2012**
4-Aminobiphényle	92-67-1	0,001	0,007	—	—	C1	15, 15bis, 15ter	—	1985
2-Aminoéthanol → Ethanolamine									
2-Aminopyridine	504-29-0	0,5	2	—	—	—	—	—	1987
3-Amino-1,2,4-triazole	61-82-5	0,06	0,2	—	—	R2	—	200	1996
Amitrole → 3-Amino-1,2,4-triazole									
Ammoniac anhydre	**7664-41-7**	**10**	**7**	**20**	**14**	**—**	**—**	**16**	**2006**
Ammonium (chlorure d'),fumées	12125-02-9	—	10	—	—	—	—	—	1987
Ammonium (sulfamate d')	7773-06-0	—	10	—	—	—	—	—	1987
Amosite → Amiante									
Amylacétate, tert.	**625-16-1**	**50**	**270**	**100**	**540**	**—**	**—**	**175**	**2004**

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Anhydride acétique	108-24-7	—	—	5	20	—	—	219	1985
Anhydride arsénieux → Arsenic (trioxyde de di-)									
Anhydride borique → Bore (trioxyde de di-)									
Anhydride chromique → Chrome hexavalent et ses composés									
Anhydride maléique	108-31-6	—	—	—	1	All	66	205	1982
Anhydride phtalique	85-44-9	—	—	—	6	All	66, 66bis	38	1982
Anhydride sulfureux → Soufre (dioxyde de)									
Anhydride trimellitique (fumées)	552-30-7	0,005	0,04	—	—	All	66, 66bis	172	1985
Aniline	62-53-3	2	10	—	—	C2, M2, *	15, 15bis	19	1983
Aniline (sels d')	—	—	7,6	—	—	C2, M2, *	15, 15bis	—	1996
o-Anisidine	90-04-0	0,1	0,5	—	—	C1B, M2, *	15, 15bis	—	1987
p-Anisidine	104-94-9	0,1	0,5	—	—	*	15, 15bis	—	1987
Antimoine et ses composés, en Sb	—	—	0,5	—	—	(2)	73	—	1984
Antimoine (hydrure d') → Hydrogène antimonié									
ANTU	86-88-4	—	0,3	—	—	C2	—	—	1987
Aramide (fibres de p-) → Fibre de p-aramide									
Argent (composés solubles), en Ag	**—**	**—**	**0,01**	**—**	**—**	**—**	**—**	**—**	**2007**
Argent (métallique)	**7440-22-4**	**—**	**0,1**	**—**	**—**	**—**	**—**	**—**	**2004**
Arsenic (trioxyde de di-), en As	1327-53-3	—	0,2	—	—	C1A	20, 20bis	89	1985
Arsine → Hydrogène arsénié									
Atrazine	1912-24-9	—	5	—	—	—	—	—	1987
Azide de sodium	**26628-22-8**		**0,1**		**0,3**	*			**2006**
Azinphos-méthyl	86-50-0	—	0,2	—	—	*	34	—	1987
Azote (oxyde d')	10102-43-9	25	30	—	—	—	—	133	1987
Azote (dioxyde d')	10102-44-0	—	—	3	6	—	—	133	1982
Azote (trifluorure d')	7783-54-2	10	30	—	—	—	—	—	1987
Baryum (composés solubles), en Ba	**—**	**—**	**0,5**	**—**	**—**	**—**	**—**	**125**	**2007**
Bénomyl	17804-35-2	0,8	10	—	—	M1B, R1B	—	—	1987
Benzène	**71-43-2**	**1**	**3,25**	**—**	**—**	**C1A, M1B, ***	**4, 4bis, 84**	**49**	**1997**
Benzidine	92-87-5	0,001	0,008	—	—	C1A	15, 15bis, 15ter	87	1985
p-Benzoquinone	106-51-4	0,1	0,4	0,3	1,5	—	—	—	1984
Béryllium et composés, en Be	7440-41-7	—	0,002	—	—	C1B	33	92	1995
Biphényle	92-52-4	0,2	1,5	—	—	—	—	101	1984
Biphényle chloré (42% Cl)	53469-21-9	—	1	—	—	*	9	194	1987
Biphényle chloré (54% Cl)	11097-69-1	—	0,5	—	—	*	9	194	1987
Bismuth (tellurure de)	1304-82-1	—	10	—	—	—	—	—	1987
Bismuth (tellurure de,dopé au Se)	—	—	5	—	—	—	—	—	1987
Bisphénol A (poussières inhalables)	**80-05-7**		**10**	**—**	**—**	**R2**		**279**	**2012**
Bois (poussières de)	**—**	**—**	**1**	**—**	**—**	**(7)**	**47**	—	**2004**
Borax → Sodium (tétraborate de)									
Bore (trioxyde de di-)	1303-86-2	—	10	—	—	R1B	—	—	1987
Bore (trifluorure de)	7637-07-2	—	—	1	3	—	32	—	1987
Brai de houille (vapeurs ou aérosols, fraction soluble dans le benzène)	65996-93-2	—	0,2	—	—	C1A, M1B, R1B	16, 16bis	91	1986
Bromacil	314-40-9	1	10	—	—	—	—	—	1987

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Brome	**7726-95-6**	**0,1**	**0,7**	**—**	**—**	**—**	**—**	**27**	**2007**
Brome (pentafluorure de)	7789-30-2	0,1	0,7	—	—	—	32	—	1987
Bromochlorométhane	74-97-5	200	1050	—	—	—	—	—	1987
Bromoéthane	74-96-4	200	890	—	—	C2	—	—	1987
Bromoforme → Tribromométhane									
Bromométhane (1)	**74-83-9**	**5**	**20**	**—**	**—**	**M2**	**26**	**67**	**2007**
Bromotrifluorométhane (F 13 B1)	75-63-8	1000	6100	—	—	—	—	163	1987
Bromure d'éthyle → Bromoéthane									
Bromure de méthyle → Bromométhane									
n-Butane	106-97-8	800	1900	—	—	—	—	—	1987
Butanethiols (isomères)	—	0,5	1,5	—	—	—	—	190	1987
2-Butanone → voir Méthyléthylcétone									
2-Butoxyéthanol	**111-76-2**	**10**	**49**	**50**	**246**	***, (12)**	**84**	**76**	**2012**
2-(2-butoxyethoxy)éthanol	**112-34-5**	**10**	**67,5**	**15**	**101,2**	**—**	**84**	**254**	**2007**
n-Butylamine	109-73-9	—	—	5	15	All	49, 49bis	—	1982
Butylglycol → 2-Butoxyéthanol									
Butylmercaptant → Butanethiol									
o-sec-Butylphénol	89-72-5	5	30	—	—	*	—	—	1987
p-tert-Butyltoluène	98-51-1	10	60	—	—	—	84	—	1987
Cadmium (oxyde de), en Cd	1306-19-0	—	—	—	0,05	C1B, M2, R2	61	60	1987
Cadmium et composés, en Cd	7440-43-9	—	0,05	—	—	(2, 9, 10)	61	60	1992
Calcite → Calcium (carbonate de)									
Calcium (carbonate de)	471-34-1	—	10	—	—	—	—	—	1987
Calcium (cyanamide de)	156-62-7	—	0,5	—	—	—	—	186	1987
Calcium (hydroxyde de)	1305-62-0	—	5	—	—	—	—	—	1987
Calcium (oxyde de)	1305-78-8		2	—	—	—	—	—	1987
Calcium (sulfate de)	10101-41-4	—	10	—	—	—	—	—	1987
Camphéchlore	8001-35-2	—	0,5	—	—	*, C2	65	—	1987
Camphre	76-22-2	2	12	—	—	—	—	—	1987
ε-Caprolactame (poudre et vapeur)	**105-60-2**	**—**	**10**	**—**	**40**	**—**	**—**	**—**	**2004**
Captafol	2425-06-1	—	0,1	—	—	*, C1B	—	—	1987
Captane	133-06-2	—	5	—	—	C2	—	—	1987
Carbaryl	63-25-2	—	5	—	—	C2	34	—	1987
Carbofuran	1563-66-2	—	0,1	—	—	—	34	—	1987
Carbone (dioxyde de)	**124-38-9**	**5000**	**9000**	**—**	**—**	**—**	**—**	**238**	**2007**
Carbone (oxyde de)	630-08-0	50	55	—	—	R1A	64	47	1985
Catéchol → Pyrocatéchol									
Cellulose (fibre de papier)	9004-34-6	—	10	—	—	—	—	282	1987
Césium (hydroxyde de)	21351-79-1	—	2	—	—	—	—	—	1987
Cétène	463-51-4	0,5	0,9	—	—	—	—	—	1987
Chanvre (fibres de)	—	—	0,2 t	—	—	—	—	66,90	1993
Chlordane	57-74-9	—	0,5	—	—	*, C2	65	—	1987
Chlore	**7782-50-5**	**—**	**—**	**0,5**	**1,5**	**—**	**—**	**51**	**2007**
Chlore (dioxyde de)	10049-04-4	0,1	0,3	0,3	0,8	—	—	258	1984
Chlore (trifluorure de)	7790-91-2	—	—	—	0,4	—	—	—	1983
α-Chloroacétophénone	532-27-4	0,05	0,3	—	—	—	—	—	1987

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Obser-vations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Chlorobenzène	**108-90-7**	**5**	**23**	**15**	**70**	**—**	**9**	**23**	**2007**
o-Chlorobenzylidène malononitrile	2698-41-1	—	—	0,05	0,4	*	—	215	1987
2-Chloro-1,3-butadiène	126-99-8	10	36	—	—	C1B	12	—	1985
Chlorodifluorométhane (F 22)	**75-45-6**	**1000**	**3600**	**—**	**—**	**—**	**—**	**142**	**2004**
1-Chloro-2,3-époxypropane → Epichlorhydrine									
Chloroéthane	**75-00-3**	**100**	**268**	**—**	**—**	**C2**	**—**	**—**	**2007**
2-Chloroéthanol → Ethylène chlorhydrine									
Chloroéthylène → Chlorure de vinyle									
Chloroforme → Trichlorométhane									
Chlorométhane	74-87-3	50	105	100	210	C2	27	64	1983
1-Chloro-1-nitropropane	600-25-9	2	10	—	—	—	—	—	1987
Chloropentafluoroéthane	76-15-3	1000	6320	—	—	—	—	—	1987
Chloropicrine	76-06-2	0,1	0,7	—	—	—	—	—	1987
b-Chloroprène → 2-Chloro-1,3-butadiène									
3-Chloropropène	107-05-1	1	3	—	—	C2, M2	12	—	1987
o-Chlorostyrène	2039-87-4	50	285	—	—	—	—	—	1987
α-Chlorotoluène	100-44-7	1	5	2	11	C1B	—	90	1984
o-Chlorotoluène	95-49-8	50	250	—	—	—	—	—	1987
Chlorpyrifos	2921-88-2	—	0,2	—	—	*	34	—	1987
Chlorure d'allyle → 3-Chloroprène									
Chlorure d'ammonium → Ammonium (chlorure d'), fumées									
Chlorure de benzyle → α-Chlorotoluène									
Chlorure de chloroacétyle	79-04-9	0,05	0,2	—	—	—	—	—	1987
Chlorure de cyanogène	506-77-4	—	—	0,3	0,6	—	—	—	1987
Chlorure d'hydrogène	**7647-01-0**			**5**	**7,6**			**13**	**2006**
Chlorure d'éthyle → Chloroéthane									
Chlorure de méthyle → Chlorométhane									
Chlorure de méthylène → Dichlorométhane									
Chlorure de phosphoryle → Phosphore (Oxytrichlorure de)									
Chlorure de vinyle	**75-01-4**	**1**	**2,59**	**—**	**—**	**C1A**	**52**	**184**	**1980**
Chlorure de vinylidène → 1,1-Dichloroéthylène									
Chromate de tert-butyle, en CrO_3	1189-85-1	—	—	—	0,1	*, C1B	—	—	1987
Chrome hexavalent et ses composés	**—**	**—**	**0,001**	**—**	**0,005**	**(2, 9, 10, 13)**	**10, 10bis, 10ter**	**180**	**2012**
Chrome (métal), composés de chrome inorganiques (II) et composés de chrome inorganiques (insolubles) (III)	**7440-47-3**	**—**	**2**	**—**	**—**	**—**	**—**	**—**	**2007**
Chrysotile → Amiante									
Clopidol	2971-90-6	—	10	—	—	—	—	—	1987
Cobalt carbonyle, en Co	10210-68-1	—	0,1	—	—	—	65	—	1987
Cobalt hydrocarbonyle, en Co	16842-03-8	—	0,1	—	—	—	65	—	1987
Colophane (produits de décomposition des baguettes de soudure, exprimés en aldéhyde formique)	—	—	0,1	—	—	—	65, 66	—	1987

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Coton (fibres de)	—	—	0,2 t	—	—	—	66, 66bis, 90	—	1995
Coumafène	81-81-2	—	0,1	—	—	R1A	—	216	1987
Crésols (tous isomères)	1319-77-3	5	22	—	—	—	—	97	1983
Cristobalite → Silices cristallines									
Crocidolite → Amiante									
Cruformate	299-86-5	—	5	—	—	—	34	—	
Cuivre (fumées)	7440-50-8	—	0,2	—	—	—	—	294	1987
Cuivre (poussières), en Cu	7440-50-8	—	1	—	2	—	—	294	1984
Cumène	**98-82-8**	**20**	**100**	**50**	**250**	*	**84**	**—**	**2007**
Cyanamide	**420-04-2**	**0,58**	**1**	**—**	**—**	*	**—**	**—**	**2007**
2-Cyanoacrylate de méthyle	137-05-3	2	8	4	18	—	66	—	1984
Cyanogène	460-19-5	2	4	10	20	—	—	—	1983/ 1982
Cyanures, en CN	—	—	5	—	—	*	—	111	1987
Cyclohexane	**110-82-7**	**200**	**700**	375	1300	**(11)**	**84**	**17**	**2007**
Cyclohexanol	108-93-0	50	200	75	300	—	84	45	1984
Cyclohexanone	**108-94-1**	**10**	**40,8**	**20**	**81,6**	**—**	**84**	**39**	**2006**
Cyclohexène	110-83-8	300	1015	—	—	—	84	—	1987
Cyclohexylamine	108-91-8	10	40	—	—	*, R2	49, 49bis	230	1987
Cyclopentadiène	542-92-7	75	200	—	—	—	84	—	1987
Cyclopentane	287-92-3	600	1720	—	—	—	84	—	1987
Cyhexatin	13121-70-5	—	5	—	—	—	—	—	1987
2,4-D	94-75-7	—	10	—	—	—	—	208	1987
Dalapon → Acide 2,2-dichloropropionique									
DDT → Zeidane									
Décaborane	17702-41-9	0,05	0,3	—	—	*	—	188	1987
Déméton (mélange O + S)	8065-48-3	0,01	0,1	—	—	*	34	—	1987
Déméton-méthyl (mélange O + S)	8022-00-2	—	0,5	—	—	*	34	—	1987
Diacétone-alcool	123-42-2	50	240	—	—	—	84	61	1987
1,2-Diaminoéthane	107-15-3	10	25	15	35	—	49, 49bis	—	1984
Diazinon	333-41-5	—	0,1	—	—	*	34	—	1987
Diborane	19287-45-7	0,1	0,1	—	—	—	—	188	1987
Dibromodifluorométhane	75-61-6	100	860	—	—	—	—	—	1987
N,N-Dibutylaminoéthanol	102-81-8	2	14	—	—	*	49, 49bis	—	1987
2,6-Di-tert-butyl-p-crésol	128-37-0	—	10	—	—	—	—	—	1987
1,2-Dichlorobenzène	**95-50-1**	**20**	**122**	**50**	**306**	*	**9**	**73**	**2007**
1,4-Dichlorobenzène	**106-46-7**	**0,75**	**4,5**	**50**	**306**	**C2**	**9**	**224**	**2004**
3,3'-Dichloro-4,4'-diaminodiphénylméthane	101-14-4	0,02	0,22	—	—	C1B	15, 15bis, 15ter	—	1986
Dichlorodifluorométhane (F 12)	75-71-8	1000	4950	—	—	—	—	135	1987
1,3-Dichloro-5,5-diméthylhydantoïne	118-52-5	—	0,2	—	—	—	—	—	1987
1,1-Dichloroéthane	**75-34-3**	**100**	**412**	**—**	**—**	*	**—**	**—**	**2004**
1,2-Dichloroéthane	107-06-2	10	40	—	—	C1B	12	54	1987
1,1-Dichloroéthylène	75-35-4	5	20	—	—	—	12	—	1987
Dichlorofluorométhane (F 21)	75-43-4	10	40	—	—	—	—	—	1987
Dichlorométhane	**75-09-2**	**50**	**178**	**100**	**356**	**C2, *, (12)**	**12**	**34**	**2012**

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
1,1-Dichloro-1-nitroéthane	594-72-9	2	10	—	—	—	—	—	1987
1,2-Dichloropropane	78-87-5	75	350	—	—	—	12	63	1987
1,2-Dichlorotétrafluoroéthane (F 114)	76-14-2	1000	7000	—	—	—	—	—	1987
Dichlorvos	62-73-7	0,1	1	—	—	*	34	116	1987
Dicrotophos	141-66-2	—	0,25	—	—	*	34	—	1987
Dicyclopentadiène	77-73-6	5	30	—	—	—	—	—	1987
Dieldrine	60-57-1	—	0,25	—	—	*, C2	65	189	1987
Diéthanolamine	111-42-2	3	15	—	—	—	49, 49bis	147	1987
Diéthion	563-12-2	—	0,4	—	—	*	34	—	1987
Diéthylamine	**109-89-7**	**5**	**15**	**10**	**30**		**49, 49bis**	**114**	**2007**
2-Diéthylaminoéthanol	100-37-8	10	50	—	—	*	49, 49bis	—	1987
Diéthylcétone	96-22-0	200	705	—	—	—	84	—	1987
Diéthylènetriamine	111-40-0	1	4	—	—	AC	49, 49bis	143	1986
Diéthyléthanolamine → 2-Diéthylaminoéthanol									
Diisobutylcétone	108-83-8	25	250	—	—	—	84	—	1987
4,4'-Diisocyanate de diphénylméthane (3)	101-68-8	0,01	0,1	0,02	0,2	AR, C2	62	129	1986
Diisocyanate d'hexaméthylène (3)	822-06-0	0,01	0,075	0,02	0,15	AR	62	164	1986
Diisocyanate d'hexaméthylène, prépolymères du	—	—	—	—	1	—	62	—	1993
Diisocyanate d'isophorone (3)	4098-71-9	0,01	0,09	0,02	0,18	AR	62	166	1986
Diisocyanate de 1,5-naphtylène (3)	3173-72-6	0,01	0,095	0,02	0,19	AR	62	—	1986
Diisocyanate de toluylène (3)	26471-62-5	0,01	0,08	0,02	0,16	AR, C2	62	46	1986
Diisopropylamine	108-18-9	5	20	—	—	*	49, 49bis	—	1987
Diméthoxyméthane → Méthylal									
N,N-Diméthylacétamide	**127-19-5**	**2**	**7,2**	**10**	**36**	***, R1B**	**—**	**261**	**2006**
Diméthylamine	**124-40-3**	**1**	**1,9**	**2**	**3,8**	—	**49, 49bis**	—	**2006**
N,N-Diméthylaniline	121-69-7	5	25	—	—	*, C2	15, 15bis	—	1987
N,N-Diméthyléthylamine	598-56-1	5	15	25	75	—	49, 49bis	127	1984
N,N-Diméthylformamide	**68-12-2**	**5**	**15**	**10**	**30**	***, R1B**	**84**	**69**	**2012**
1,1-Diméthylhydrazine	57-14-7	0,1	0,2	—	—	C1B, AC	—	—	1983
Dinitrate d'éthylène → Nitroglycol									
Dinitrate de 1,2-propylèneglycol	6423-43-4	0,05	0,3	—	—	*	—	—	1987
Dinitrobenzène (tous isomères)	25154-54-5	0,15	1	—	—	—	13	—	1984
4,6-Dinitro-o-crésol	534-52-1	—	0,2	—	—	*, M2	14	—	1987
3,5-Dinitro-o-toluamide	148-01-6	—	5	—	—	—	—	—	1987
1,4-Dioxane	**123-91-1**	**20**	**73**	40	140	**C2, (11)**	**84**	**28**	**2012**
Dioxathion	78-34-2	—	0,2	—	—	*	34	—	1987
Dioxyde d'azote → Azote (dioxyde d')									
Dioxyde de carbone → Carbone (dioxyde d')									
Diphénylamine	122-39-4	—	10	—	—	—	15, 15bis	—	1987
Dipropylcétone	123-19-3	50	235	—	—	—	84	—	1987
Diquat	85-00-7	—	0,5	—	—	—	—	288	1987
Disulfiram	97-77-8	—	2	—	—	—	—	—	1987
Disulfoton	298-04-4	—	0,1	—	—	—	34	—	1987
Disulfure d'allyle et de propyle	2179-59-1	2	12	—	—	—	—	—	1987
Disulfure de carbone → Sulfure de carbone									

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Obser-vations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Diuron	330-54-1	—	10	—	—	C2	—	—	1987
1,3-Divinylbenzène	108-57-6	10	50	—	—	—	—	—	1987
Eau oxygénée → Peroxyde d'hydrogène									
Endosulfan	115-29-7	—	0,1	—	—	*	65	—	1987
Endrine	72-20-8	—	0,1	—	—	*	65	—	1987
Epichlorhydrine	106-89-8	—	—	2	10	C1B	65, 51	187	1982
1,2-Epoxypropane → Oxyde de propylène									
Etain (composés organiques d'), en Sn	—	—	0,1	—	0,2	—	—	—	1984
Ethanethiol	75-08-1	0,5	1	—	—	—	—	190	1985
Ethanolamine	**141-43-5**	**1**	**2,5**	**3**	**7,6**	*	**49, 49bis**	**146**	**2007**
Ether méthylique du propylène-glycol → 1-Méthoxy-2-propanol									
Ether méthylique du dipropylène-glycol → 3-(3-Méthoxy) propoxy-1-propanol									
Ethion → Diéthion									
2-Ethoxyéthanol	**110-80-5**	**2**	**8**	**—**	**—**	***, R1B**	**84**	**58**	**2012**
Ethylamine	**75-04-7**	**5**	**9,4**	**15**	**28,2**	**—**	**49, 49bis**	**134**	**2007**
Ethylbenzène	**100-41-4**	**20**	**88,4**	**100**	**442**	*	**84**	**266**	**2007**
Ethylbutylcétone → 3-Heptanone									
Ethylène chlorohydrine	107-07-3	—	—	1	3	*	—	—	1987
Ethylènediamine → 1,2-Diaminoéthane									
Ethylèneglycol (vapeur)	**107-21-1**	**20**	**52**	**40**	**104**	*	**84**	**25**	**2004**
Ethylglycol → 2-Ethoxyéthanol									
Ethylidène norbornène	16219-75-3	—	—	5	25	—	—	—	1987
Ethylisoamylcétone → 5-Méthyl-3-heptanone									
Ethylmercaptan → Ethanethiol									
N-Ethylmorpholine	100-74-3	5	23	—	—	*	—	—	1987
Fenchlorphos	299-84-3	—	10	—	—	—	34	—	1987
Fensulfothion	115-90-2	—	0,1	—	—	—	34	—	1987
Ferbame	14484-64-1	—	10	—	—	—	65	—	1987
Fer dicyclopentadiényle	102-54-5	—	10	—	—	—	—	—	1987
Fer (oxyde rouge synthétique)	—	—	10	—	—	—	—	—	1987
Fer pentacarbonyle, en Fe	13463-40-6	0,1	0,8	—	—	—	—	—	1987
Fer (trioxyde de di-, fumées), en Fe	1309-37-1	—	5	—	—	—	44, 44bis, 94	—	1987
Fibres de p-aramide	—	1 fibre cm^{-3}		—	—	—	—	—	1996
Fibres céramiques réfractaires classées cancérogènes	**—**	**0,1 fibre cm^{-3}**		**—**	**—**	**C1B**	**—**	**—**	**2007**
Fibres de laitier	—	1 fibre cm^{-3}		—	—	C2, (4)	—	—	1996
Fibres de roche	—	1 fibre cm^{-3}		—	—	C2, (4)	—	—	1995
Fibres végétales (toutes sortes, non déjà citées par ailleurs)	—	—	0,5 t	—	—	—	66, 90	—	1993
Fibres de verre	—	1 fibre cm^{-3}		—	—	C2, (4)	—	268	1995

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Fluor	**7782-41-4**	**1**	**1,58**	**2**	**3,16**	**—**	**32**	**203**	**2004**
Fluorure d'hydrogène	**7664-39-3**	**1,8**	**1,5**	**3**	**2,5**		**32**	**6**	**2007**
Fluorures inorganiques	**—**	**—**	**2,5**	**—**	**—**	**—**	**32**	**191**	**2004**
Fluorure de carbonyle	353-50-4	2	5	—	—	—	—	—	1987
Fluorure de sodium → Sodium (fluorure de)									
Fonofos	944-22-9	—	0,1	—	—	*	34	—	1987
Formamide	75-12-7	20	30	—	—	R1B	—	285	1987
Formiate d'éthyle	109-94-4	100	300	—	—	—	84	—	1987
Formiate de méthyle	107-31-3	100	250	—	—	—	84	—	1987
Fumées de soudage (totalité des particules)	—	—	5	—	—	—	—	—	1987
Fumées de vulcanisation des caoutchoucs, fraction soluble dans le cyclohexane	—	—	0,6	—	—	—	—	—	1993
Furfural → Aldéhyde furfurylique									
Germanium (tétrahydrure de)	7782-65-2	0,2	0,6	—	—	—	—	—	1987
Glycérine (aérosols de)	56-81-5	—	10	—	—	—	—	—	1987
Glycidol	556-52-5	25	75	—	—	C1B, M2, R1B	—	—	1987
Graphite	7782-42-5	—	2 a	—	—	—	25	—	1993
Gypse → Calcium (sulfate de)									
Hafnium	7440-58-6	—	0,5	—	—	—	—	—	1987
γ -HCH (Lindane)	58-89-9	—	0,5	—	—	*	65	81	1987
Heptachlore	76-44-8	0,03	0,5	—	—	C2	—	—	1996
n-Heptane	**142-82-5**	**400**	**1668**	**500**	**2085**	**—**	**84**	**168**	**2007**
2-Heptanone → Méthyl-n-amylcétone									
3-Heptanone	**106-35-4**	**20**	**95**	**—**	**—**	—	84	—	**2006**
Hexachlorocyclopentadiène	77-47-4	0,01	0,1	—	—	—	—	—	1987
Hexachloroéthane	67-72-1	1	—	10	—	—	—	—	1993
Hexachloronaphtalène	1335-87-1	—	0,2	—	—	*	9	93	1987
Hexafluoroacétone	684-16-2	0,1	0,7	—	—	—	—	—	1987
n-Hexane	**110-54-3**	**20**	**72**	**—**	**—**	**R2**	**59, 84**	**113**	**2007**
Hexane (autres isomères)	—	500	1800	—	—	—	84	113	1987
2-Hexanone	591-78-6	5	20	8	35	R2	84	122	1984
Hexogène (Cyclonite)	121-82-4	—	1,5	—	—	*	—	—	1987
Hexylèneglycol	107-41-5	—	—	25	125	—	84	167	1987
Hydrazine	302-01-2	0,1	0,1	—	—	C1B, AC	—	21	1985
Hydrocarbures en C6-C12 (ensemble des,vapeurs) (5)	—	—	1000 (6)	—	1500	(14)	84	84, 94, 96, 106, 140	1993
Hydrocarbures benzéniques en C9-C12 (vapeurs) (5)	—	—	150	—	—	(14)	84	94, 96, 106, 140	1993
Hydrogène antimonié	7803-52-3	0,1	0,5	—	—	—	73	202	1983
Hydrogène arsénié	7784-42-1	0,05	0,2	0,2	0,8	—	21	53	1983
Hydrogène phosphoré	**7803-51-2**	**0,1**	**0,14**	**0,2**	**0,28**	**—**	**—**	**179**	**2007**
Hydrogène sélénié	**7783-07-5**	**0,02**	**0,07**	**0,05**	**0,17**	**—**	**75**	**150**	**2004**
Hydrogène sulfuré	**7783-06-4**	**5**	**7**	**10**	**14**	**—**	**—**	**32**	**2012**
Hydroquinone	123-31-9	—	2	—	—	C2, M2	65	159	1987
Indène	95-13-6	10	45	—	—	—	—	—	1987
Iode	7553-56-2	—	—	0,1	1	—	—	207	1982

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Iodoforme → Triodométhane									
Iodométhane	74-88-4	2	12	—	—	C2	—	—	1996
Isocyanate de méthyle	**624-83-9**	**—**	**—**	**0,02**	**—**	**R2**	**62**	**162**	**2012**
Isopentane	**78-78-4**	**1000**	**3000**	**—**	**—**	**—**	**84**	**—**	**2007**
Isophorone	78-59-1	—	—	5	25	C2	84	118	1986
2-Isopropoxyéthanol	109-59-1	25	105	—	—	—	84	—	1987
Isopropylamine	75-31-0	5	12	—	—	—	49, 49bis	130	1987
N-Isopropylaniline	768-52-5	2	10	—	—	*	15, 15bis	—	1987
Isopropylbenzène → Cumène									
Kaolin	—	—	10	—	—	—	25	—	1987
Lactate de n-butyle	138-22-7	5	25	—	—	—	84	—	1987
Lin (fibres de)	—	—	0,2 t	—	—	—	66, 90	—	1993
Lindane → g-HCH									
Lithium (hydrure de)	7580-67-8	—	0,025	—	—	—	—	183	1987
Magnésite → Magnésium (carbonate de)									
Magnésium (carbonate de)	546-93-0	—	10	—	—	—	—	—	1987
Magnésium (oxyde de), fumées	1309-48-4	—	10	—	—	—	—	—	1987
Malathion	121-75-5	—	10	—	—	*	34	—	1987
Manganèse cyclopentadiényltricarbonyle, en Mn	12079-65-1	—	0,1	—	—	*	—	—	1987
Manganèse (fumées), en Mn	—	—	1	—	—	—	—	—	1983
Manganèse méthylcyclopentadiényltricarbonyle, en Mn	12108-13-3	—	0,2	—	—	*	—	—	1987
Manganèse (tétraoxyde de tri-)	1317-35-7	—	1	—	—	—	—	—	1987
Marbre → Calcium (Carbonate de)									1987
Mercure et composés bivalents du mercure, y compris l'oxyde de mercure et le chlorure de mercurique	**—**	**—**	**0,02**	**—**	**—**	**(9), (10)**	**2**	**55**	**2012**
Mercure (composés alkylés), en Hg	—	—	0,01	—	—	*	2	—	1987
Mercure (composés arylés et inorganiques), en Hg	—	—	0,1	—	—	*	2	55	1987
Mésitylène → 1,3,5-Triméthylbenzène									
Méthacrylate de méthyle	**80-62-6**	**50**	**205**	**100**	**410**	**—**	**82**	**62**	**2012**
Méthanethiol	74-93-1	0,5	1	—	—	—	—	190	1985
Méthanol	**67-56-1**	**200**	**260**	1000	1300	***, (11)**	**84**	**5**	**2007**
Méthomyl	16752-77-5	—	2,5	—	—	*	—	—	1987
Méthoxychlore	72-43-5	—	10	—	—	—	65	—	1987
2-Méthoxyéthanol	**109-86-4**	**1**	**3,2**	**—**	**—**	***, R1B**	**84**	**103**	**2012**
2-(2-méthoxyéthoxy)éthanol	**111-77-3**	**10**	**50,1**	**—**	**—**	***, R2**	**84**	**—**	**2007**
4-Méthoxyphénol	150-76-5	—	5	—	—	—	—	—	1987
(2-méthoxyméthylethoxy)-propanol	**34590-94-8**	**50**	**308**	**—**	**—**	*****	**84**	**—**	**2007**
1-Méthoxy-2-propanol	**107-98-2**	**50**	**188**	**100**	**375**	*****	**84**	**221**	**2007**
Méthylacrylonitrile	126-98-7	1	3	—	—	*	—	—	1987
Méthylal	109-87-5	1000	3100	—	—	—	84	139	1987
Méthylamine	74-89-5	—	—	10	12	All	49, 49bis	—	1982
Méthyl-n-amylcétone	**110-43-0**	**50**	**238**	**100**	**475**	*****	**84**	**—**	**2007**
N-Méthylaniline	100-61-8	0,5	2	—	—	*	15,15bis	—	1987
Méthyl-n-butylcétone → 2-Hexanone									
Méthylcyclohexane	108-87-2	400	1600	—	—	—	84	—	1987

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Méthylcyclohexanol	25639-42-3	50	235	—	—	—	84	—	1987
2-Méthylcyclohexanone	583-60-8	50	230	—	—	*	84	—	1987
4,4'-Méthylènebis(2-chloroaniline) → 3,3'-Dichloro-4,4'-diaminodiphénylméthane									
Méthyléthylcétone	**78-93-3**	**200**	**600**	**300**	**900**	*	**84**	**14**	**2007**
Méthylglycol → 2-Méthoxyéthanol									
5-Méthyl-2-heptanone → Méthylisoamylcétone									
5-Méthyl-3-heptanone	**541-85-5**	**10**	**53**	**20**	**107**	—	**84**	—	**2004**
Méthylhydrazine	60-34-4	0,2	0,35	—	—	—	49, 49bis	—	1983
Méthylisoamylcétone	**110-12-3**	**20**	**95**	**100**	**475**	—	**84**	—	**2004**
Méthylisobutylcarbinol → 4-Méthyl-2-pentanol									
Méthylisobutylcétone	**108-10-1**	**20**	**83**	**50**	**208**	—	84	56	**2006**
Méthylisopropylcétone	563-80-4	200	705	—	—	—	84	—	1987
Méthylmercaptan → Méthanethiol									
4-Méthyl-2-pentanol	108-11-2	25	100	—	—	*	84	—	1987
4-Méthyl-2-pentanone → Méthylisobutylcétone									
Méthyl-n-propylcétone	107-87-9	200	705	—	—	—	84	—	1987
N-méthyl-2-pyrrolidone	**872-50-4**	**10**	**40**	**20**	**80**	***, R1B**	**84**	**213**	**2012**
α-Méthylstyrène → 2-phénylpropène									
Métribuzine	21087-64-9	—	5	—	—	—	—	—	1987
Mévinphos	7786-34-7	0,01	0,1	—	—	*	34	—	1987
Molybdène (composés solubles), en Mo	—	—	5	—	10	—	—	—	1984
Monocrotophos	6923-22-4	—	0,25	—	—	M2	34	—	1987
Morpholine	**110-91-8**	**10**	**36**	**20**	**72**	—	—	**265**	**2007**
Naled	300-76-5	—	3	—	—	*	34	—	1987
Naphtalène	91-20-3	10	50	—	—	C2	—	204	1983
2-Naphtylamine	91-59-8	0,001	0,005	—	—	C1A	15, 15bis, 15ter	—	1985
1-Naphtylthiourée → ANTU									
Néopentane	**463-82-1**	**1000**	**3000**	—	—	—	**84**	—	**2004**
Nickel (carbonate de), en Ni	3333-67-3	—	1	—	—	C1A, M2, R1B	37, 37bis	68	1995
Nickel (dihydroxyde de), en Ni	12054-48-7	—	1	—	—	C1A, M2, R1B	37, 37bis	68	1995
Nickel (disulfure de tri), en Ni	12035-72-2	—	1	—	—	C1A, M2	37, 37bis	68	1995
Nickel (grillage des mattes), en Ni		—	1	—	—	(7)	37ter	68	1985
Nickel (métal)	7440-02-0	—	1	—	—	C2	—	68	1987
Nickel (oxyde de), en Ni	1313-99-1	—	1	—	—	C1A	37, 37bis	68	1995
Nickel (sulfate de), en Ni	7786-81-4	—	0,1	—	—	C1A, M2, R1B	37, 37bis	68	1995
Nickel (sulfure de), en Ni	16812-54-7	—	1	—	—	C1A, M2	37, 37bis	68	1995
Nickel tétracarbonyle	13463-39-3	0,05	0,12	—	—	C2, R1B	—	—	1995
Nickel (trioxyde de), en Ni	1314-06-3	—	1	—	—	C1A	37, 37bis	68	1995
Nicotine	**54-11-5**	**—**	**0,5**	**—**	**—**	*	**—**	**—**	**2007**
Nitrapyrine	1929-82-4	—	10	—	—	—	—	—	1987
Nitrate de n-propyle	627-13-4	25	105	—	—	—	—	—	1987
4-Nitroaniline	100-01-6	—	3	—	—	*	15,15bis	—	1987
Nitrobenzène	**98-95-3**	**0,2**	**1**	**—**	**—**	**C2, R1B, ***	**13**	**84**	**2007**

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Nitroéthane	79-24-3	100	310	—	—	—	84	—	1987
Nitroglycérine (8)	55-63-0	0,1	1	—	—	*	72	—	1995
Nitroglycol (8)	628-96-6	0,17	1	—	—	*	72	—	1995
Nitrométhane	75-52-5	100	250	—	—	—	84	210	1987
1-Nitropropane	108-03-2	25	90	—	—	—	84	—	1987
m-Nitrotoluène	99-08-1	2	11	—	—	*	13	—	1987
Nitrotrichlorométhane → Chloropicrine									
Noir de carbone	1333-86-4	—	3,5	—	—	—	—	264	1987
n-Nonane	111-84-2	200	1050	—	—	—	84	—	1987
Octachloronaphtalène	2234-13-1	—	0,1	—	—	*	9	93	1987
n-Octane	111-65-9	300	1450	—	—	—	84	—	1987
Osmium (tétroxyde d'), en Os	20816-12-0	0,0002	0,002	—	—	—	—	—	1987
Oxyde d'allyle et de glycidyle	106-92-3	5	22	—	—	*, C2, M2, R2	—	—	1987
Oxyde d'azote → Azote (oxyde d')									
Oxyde de biphényle	101-84-8	1	7	—	—	—	—	—	1983
Oxyde de biphényle chloré	55720-99-5	—	0,5	—	—	—	—	—	1987
Oxyde debis (chlorométhyle)	542-88-1	0,001	0,005	—	—	C1A	81	—	1985
Oxyde de n-butyle et de glycidyle	2426-08-6	25	135	—	—	C2, M2	—	—	1987
Oxyde de carbone → Carbone (oxyde de)									
Oxyde de 2,2'-dichlorodiéthyle	111-44-4	5	30	—	—	*, C2	—	—	1987
Oxyde de diéthyle	**60-29-7**	**100**	**308**	**200**	**616**	**—**	**84**	**10**	**2007**
Oxyde de diglycidyle	2238-07-5	0,1	0,5	—	—	—	—	—	1987
Oxyde de diisopropyle	108-20-3	250	1050	—	—	—	84	—	1987
Oxyde de diméthyle	**115-10-6**	**1000**	**1920**	**—**	**—**				**2004**
Oxyde d'éthylène	75-21-8	1	—	5	—	C1B, M1B	66	70	1993
Oxyde de glycidyle et d'isopropyle	4016-14-2	50	240	—	—	—	—	—	1987
Oxyde de glycidyle et de phényle	122-60-1	1	6	—	—	C1B, M2	—	—	1987
Oxyde de mésityle	141-79-7	15	60	—	—	—	84	—	1987
Oxyde de propylène	75-56-9	20	50	—	—	C1B, M1B	—	—	1987
Oxyde de tert-butyle et de méthyle	**1634-04-4**	**50**	**183,5**	**100**	**367**	**—**	**84**	**242**	**2012**
Ozone	10028-15-6	0,1	0,2	0,2	0,4	—	—	43	1982
Paraffine (cire de), fumée	8002-74-2	—	2	—	—	—	36	—	1987
Paraquat	4685-14-7	—	0,1	—	—	—	—	182	1987
Parathion	56-38-2	—	0,1	—	—	*	34	83	1987
Parathion-méthyle	298-00-0	—	0,2	—	—	*	34	—	1987
Pentaborane	19624-22-7	0,005	0,01	—	—	—	—	188	1987
Pentachloronaphtalène	1321-64-8	—	0,5	—	—	—	9	93	1987
Pentachlorophénol	87-86-5	—	0,5	—	—	*, C2, AC	14	11	1986
Pentachlorophénol (sels du)	—	—	0,5	—	—	*, C2, AC	14	11	1996
Pentaérythritol	115-77-5	—	10	—	—	—	—	—	1987
n-Pentane	**109-66-0**	**1000**	**3000**	**—**	**—**	**—**	**84**	**—**	**2007**
Perchloroéthylène	**127-18-4**	**20**	**138**	**40**	**275**	**C2, (12)**	**12, 84**	**29**	**2012**
Perchlorométhanethiol	594-42-3	0,1	0,8	—	—	—	—	—	1987
Perchloryle (fluorure de)	7616-94-6	3	14	—	—	—	—	—	1987
Peroxyde de dibenzoyle	94-36-0	—	5	—	—	—	—	33	1987
Peroxyde d'hydrogène	7722-84-1	1	1,5	—	—	—	—	123	1987

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Peroxyde de méthyléthylcétone	1338-23-4	—	—	0,2	1,5	—	—	50	1987
Phénamiphos	22224-92-6	—	0,1	—	—	*	34	—	1987
Phénol	**108-95-2**	**2**	**7,8**	**4**	**15,6**	***, M2**	**—**	**15**	**2007**
Phénothiazine	92-84-2	—	5	—	—	*	65	—	1987
p-Phénylènediamine	106-50-3	—	0,1	—	—	*, AC	15, 15bis	263	1986
Phénylphosphine	638-21-1	—	—	0,05	0,25	—	—	—	1987
2-Phénylpropène	**98-83-9**	**25**	**123**	**100**	**492**	**—**	**—**	**—**	**2004**
Phénylthiophosphonate de O-éthyle et de O-4-nitrophényle	2104-64-5	—	0,5	—	—	*	34	—	1987
Phorate	298-02-2	—	0,05	—	—	*	34	—	1987
Phosgène	**75-44-5**	**0,02**	**0,08**	**0,1**	**0,4**	**—**	**—**	**72**	**2007**
Phosphate de dibutyle	107-66-4	1	5	—	—	—	—	—	1987
Phosphate de tributyle	126-73-8	0,2	2,5	—	—	C2	—	231	1987
Phosphate de tri-o-crésyle	78-30-8	—	0,1	—	—	*	—	44	1987
Phosphate de triphényle	115-86-6	—	3	—	—	—	—	—	1987
Phosphine → Hydrogène phosphoré									
Phosphite de triméthyle	121-45-9	2	10	—	—	—	—	—	1987
Phosphore blanc	12185-10-3	—	0,1	—	0,3	—	5	100	1983
Phosphore (oxytrichlorure de)	10025-87-3	0,1	0,6	—	—	—	—	108	1987
Phosphore (pentachlorure de)	**10026-13-8**		**1**	**—**	**—**	**—**	**—**	**—**	**2007**
Phosphore (pentaoxyde de di-)	**1314-56-3**	**—**	**1**	**—**	**—**	**—**	**—**	**—**	**2007**
Phosphore (pentasulfure de di-)	**1314-80-3**	**—**	**1**	**—**	**—**	**—**	**—**	**—**	**2007**
Phosphore (trichlorure de)	7719-12-2	0,2	1,5	—	—	—	—	—	1987
Phtalate de dibutyle	84-74-2	—	5	—	—	R1B		98	1987
Phtalate de diéthyle	84-66-2	—	5	—	—	—	—	—	1987
Phtalate de di(2-éthylhexyle)	117-81-7	—	5	—	—	R1B		161	1987
Phtalate de diméthyle	131-11-3	—	5	—	—	—	—	—	1987
m-Phtalodinitrile	626-17-5	—	5	—	—	—	—	—	1987
Picloram	1918-02-1	—	10	—	—	—	—	—	1987
Pindone → Pivaldione									
Pipérazine (poussières et vapeurs)	**110-85-0**	**—**	**0,1**	**—**	**0,3**	**R2**	**65, 66**	**—**	**2004**
Pipérazine (dichlorhydrate de)	142-64-3	—	5	—	—	R2	65	—	1987
Pivaldione	83-26-1	—	0,1	—	—	—	—	—	1987
Platine (métal)	7440-06-4	—	1	—	—	—	—	—	1987
Plomb métallique et composés, en Pb	**—**	**—**	**0,1**	**—**	**—**	**(2) (10)**	**1**	**59**	**2004**
Plomb tétraéthyle, en Pb	78-00-2	—	0,1	—	—	*, R1A	1	99	**1987**
Plomb tétraméthyle, en Pb	75-74-1	—	0,15	—	—	*, R1A	1	99	1987
Potassium (hydroxyde de)	1310-58-3	—	—	—	2	—	—	35	1987
Poussières réputées sans effet spécifique	**—**	**—**	**10, 5 a**	**—**	**—**	**—**	**—**	**—**	**1984**
Propoxur	114-26-1	—	0,5	—	—	—	34	—	**1987**
Propyne	74-99-7	1000	1650	—	—	—	—	—	1987
Pyrèthre (après suppression des lactones sensibilisantes)	**8003-34-7**	**—**	**1**	**—**	**—**	**—**	**—**	**—**	**2007**
Pyridine	110-86-1	5	15	10	30	—	84	85	1983
Pyrocatéchol	120-80-9	5	20	—	—	—	—	—	1987
Pyrophosphate tétrasodique	7722-88-5	—	5	—	—	—	—	—	1987
Quartz → Silices cristallines									

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Observations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
P-Quinone → p-Benzoquinone									
Résorcinol	**108-46-3**	**10**	**45**	**—**	**—**	*****	**—**	**178**	**2007**
Rhodium (métal)	7440-16-6	—	1	—	—	—	—	—	1987
Saccharose	57-50-1	—	10	—	—	—	—	—	1987
Sélénium (hexafluorure de), en Se	7783-79-1	0,05	0,2	—	—	—	32, 75	150	1987
Séléniure de dihydrogène → Hydrogène sélénié									
Silicate d'éthyle	78-10-4	10	85	—	—	—	—	—	1987
Silicate de méthyle	681-84-5	1	6	—	—	—	—	—	1987
Silices cristallines (cf. § 2.2.3 ED 984)									—
cristobalite	**14464-46-1**	**—**	**0,05 a**	**—**	**—**	**—**	**25**	**232**	**1997**
quartz	**14808-60-7**	**—**	**0,1 a**	**—**	**—**	**—**	**25**	**232**	**1997**
tridymite	**15468-32-3**	**—**	**0,05 a**	**—**	**—**	**—**	**25**	**232**	**1997**
Silicium	7440-21-3	—	10	—	—	—	—	—	1987
Silicium (carbure de)	409-21-2	—	10	—	—	—	—	—	1987
Silicium (tétrahydrure de)	7803-62-5	5	7	—	—	—	—	—	1987
Sodium (bisulfite de)	7631-90-5	—	5	—	—	—	66	—	1987
Sodium (2-(2,4-dichlorophénoxy)-éthylsulfate de)	136-78-7	—	10	—	—	—	—	—	1987
Sodium (fluoroacétate de)	62-74-8	—	0,05	—	—	*	—	—	1987
Sodium (fluorure de), en F	7681-49-4	—	2	—	—	—	32	191	1983
Sodium (hydroxyde de)	1310-73-2	—	2	—	—	—	—	20	1985
Sodium (métabisulfite de)	7681-57-4	—	5	—	—	—	66	—	1987
Sodium (tétraborate de,anhydre)	1330-43-4	—	1	—	—	R1B	287	—	1987
Sodium (tétraborate,décahydraté)	1303-96-4	—	5	—	—	R1B	287	—	1987
Sodium (tétraborate,pentahydraté)	12179-04-3	—	1	—	—	R1B	287	—	1987
Soufre (dioxyde de)	7446-09-5	2	5	5	10	—	—	41	1982
Soufre (hexafluorure de)	2551-62-4	1000	6000	—	—	—	32	102	1987
Stibine → Hydrogène antimonié									
Strychnine	57-24-9	—	0,15	—	—	—	—	—	1987
Styrène	**100-42-5**	**23,3**	**100**	**46,6**	**200**	**R2, *, (15)**	**84**	**2**	**2016**
Sulfate de diméthyle	77-78-1	0,1	0,5	—	—	C1B, M2	—	78	1986
Sulfotep	**3689-24-5**	**—**	**0,1**	**—**	**—**	*****	**34**	**—**	**2007**
Sulfure de carbone	**75-15-0**	**5**	**15**	25	75	**R2, *, (11)**	**22**	**12**	**2012**
Sulfuryle (fluorure de)	2699-79-8	5	20	—	—	—	—	—	1987
Sulprofos	35400-43-2	—	1	—	—	—	34	—	1987
2,4,5-T	93-76-5	—	10	—	—	—	—	—	1987
Tantale (métal)	7440-25-7	—	5	—	—	—	—	—	1987
Tellure et composés (sauf hexafluorure), en Te	—	—	0,1	—	—	—	—	—	1984
Tellure (hexafluorure de), en Te	7783-80-4	0,02	0,2	—	—	—	32	—	1987
Témephos	3383-96-8	—	10	—	—	—	34	—	1987
TEPP	107-49-3	0,004	0,05	—	—	*	34	—	1987
Térébenthine	8006-64-2	100	560	—	—	—	65, 84	132	1987
Terphényles	26140-60-3	—	—	0,5	5	—	—	—	1987
Terphényles hydrogénés	37275-59-5	0,5	5	—	—	—	—	—	1987
1,1,2,2-Tétrabromoéthane	79-27-6	1	15	—	—	—	—	—	1987
Tétrabromométhane	558-13-4	0,1	1,4	—	—	—	—	—	1987
Tétrabromure d'acétylène → 1,1,2,2-Tétrabromoéthane									

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Obser-vations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Tétrabromure de carbone → Tétrabromoéthane									
1,1,1,2-Tétrachlorodifluoroéthane	76-11-9	500	4170	—	—	—	—	—	1987
1,1,2,2-Tétrachlorodifluoroéthane	76-12-0	500	4170	—	—	—	—	—	1987
1,1,2,2-Tétrachloroéthane	79-34-5	1	7	5	35	—	3	36	1983
Tétrachloroéthylène → Perchloréthylène									—
Tétrachlorométhane	56-23-5	2	12	10	60	C2	11	8	1983
Tétrachloronaphtalène	1335-88-2	—	2	—	—	—	9	93	1987
Tétrachlorure de carbone → Tétrachlorométhane									
Tétrahydrofuranne	**109-99-9**	**50**	**150**	**100**	**300**	**C2, ***	**84**	**42**	**2007**
Tétraméthylsuccinonitrile	3333-52-6	0,5	3	—	—	*	—	—	1987
Tétranitrométhane	509-14-8	1	8	—	—	—	—	—	1987
Tétryl	479-45-8	—	1,5	—	—	*	15, 15bis	—	1987
Thallium	7440-28-0	—	0,1	—	—	—	—	—	1983
4,4'-Thiobis(6-tert-butyl-m-crésol)	96-69-5	—	10	—	—	—	—	—	1987
Thiophénol	108-98-5	0,5	2	—	—	—	—	—	1987
Thirame	137-26-8	—	5	—	—	—	—	—	1987
Titane (dioxyde de), en Ti	13463-67-7	—	10	—	—	—	—	291	1987
Toluène	**108-88-3**	**20**	**76,8**	**100**	**384**	**R2, *, (12)**	**4bis, 84**	**74**	**2012**
o-Toluidine	95-53-4	2	9	—	—	C1B	15, 15bis, 15ter	197	1986
Toxaphène → Camphéchlore									
Tribromométhane	75-25-2	0,5	5	—	—	*	12	176	1987
1,2,4-Trichlorobenzène	**120-82-1**	**2**	**15,1**	**5**	**37,8**	*****	**9**	**151**	**2007**
1,1,1-Trichloroéthane	**71-55-6**	**100**	**555**	**200**	**1110**	**—**	**12**	**26**	**2006**
Trichloroéthylène	79-01-6	75	405	200	1080	C1B, M2	12	22	1983
Trichlorofluorométhane (F 11)	75-69-4	—	—	1000	5600	—	—	136	1987
Trichlorométhane	**67-66-3**	**2**	**10**	50	250	***, C2, R2, (11)**	**12**	**82**	**2007**
Trichloronaphtalène	1321-65-9	—	5	—	—	*	9	93	1987
1,1,2-Trichlorotrifluoroéthane (F 113)	76-13-1	1000	7600	1250	9500	—	—	65	1983
Tridymite → Silice cristallines									—
Triéthylamine	**121-44-8**	**1**	**4,2**	**3**	**12,6**	*****	**49, 49bis**	**115**	**2007**
Triiodométhane	75-47-8	0,6	10	—	—	—	—	—	1987
Triméthylamine	75-50-3	—	—	10	25	All	49, 49bis	—	1982
1,2,3-Triméthylbenzène	**526-73-8**	**20**	**100**	**50**	**250**		**84**		**2007**
1,2,4-Triméthylbenzène	**95-63-6**	**20**	**100**	**50**	**250**		**84**		**2007**
1,3,5-Triméthylbenzène	**108-67-8**	**20**	**100**	**50**	**250**		**84**	**223**	**2007**
Triméthylène trinitramine → Hexogène									
2,4,6-Trinitrophénol → Acide picrique									
2,4,6-Trinitrophénylméthyl nitramine → Trétryl									
2,4,6-Trinitrotoluène	118-96-7	—	0,5	—	—	*	13	—	1987
Triphénylamine	603-34-9	—	5	—	—	—	15, 15bis	—	1987
Vanadium, poussières et fumées (en V2O5)	1314-62-1	—	0,05	—	—	(2) (9) (10)	66	—	1987
N-Vinylpyrrolidinone	88-12-0	0,1	—	—	—	C2	—	235	1993
Vinyltoluènes (tous isomères)	25013-15-4	50	240	—	—	—	—	—	1987

Désignation	N° CAS	VLEP-8h		VLCT (ou VLE)		Obser-vations	TMP n°	FT n°	Année
		ppm	mg.m^{-3}	ppm	mg.m^{-3}				
Warfarine → Coumafène									
m-Xylène	**108-38-3**	**50**	**221**	**100**	**442**	*	**4bis, 84**	**77**	**2007**
o-Xylène	**95-47-6**	**50**	**221**	**100**	**442**	*	**4bis, 84**	**77**	**2007**
p-Xylène	**106-42-3**	**50**	**221**	**100**	**442**	*	**4bis, 84**	**77**	**2007**
Xylène, isomères mixtes, purs	**1330-20-7**	**50**	**221**	**100**	**442**	*	**4bis, 84**	**77**	**2007**
m-Xylène- α,α'-diamine	1477-55-0	—	—	—	0,1	—	—	—	1987
Xylidines (tous isomères)	1300-73-8	2	10	—	—	*	15, 15bis	—	1987
Yttrium	7440-65-5	—	1	—	—	—	—	—	1987
Zeidane	50-29-3	—	1	—	—	C2	65	—	1987
Zinc (chlorure de,fumées)	7646-85-7	—	1	—	—	—	—	75	1987
Zinc (oxyde de,fumées)	1314-13-2	—	5	—	—	—	—	75	1987
Zinc (oxyde de,poussières)	1314-13-2	—	10	—	—	—	—	75	1987
Zinc (stéarate de)	557-05-1	—	10	—	—	—	—	75	1987

➢ Germany[35]

Substance	Acceptable concentration			Tolerable concentration			Remarks
	Vol-conc.	Mass conc.	Notes *)	Vol-conc.	Mass conc.	EF**)	
Acrylamide		0.07 mg/m³	b)		0.15 mg/m³	8	(1), (2)
Acrylonitrile	0.12 ppm	0.26 mg/m³	b)	1.2 ppm	2.6 mg/m³	8	H
Aluminium silicate fibres		10,000 fibres/m³	b), d)		100,000 fibres/m³	8	See also TRGS 558
Arsenic compounds, classified as C1A, C1B		0.83 µg/m³ (E)	b)		8.3 µg/m³ (E)	8	See also TRGS Metals (in preparation)
Asbestos		10,000 fibres/m³	b)		100000 fibres/m³	8	See also TRGS 517, 519
Benzene	0.06 ppm	0.2 mg/m³	b)	0.6 ppm	1.9 mg/m³	8	H
Benzo(a)pyrene in certain PAH compounds		70 ng/m³ (E)	b)		700 ng/m³ (E)	8	See TRGS 551 (under revision)
1,3-Butadiene	0.2 ppm	0.5 mg/m³	b)	2 ppm	5 mg/m³	8	
Cadmium and Cd compounds, classied as C1A, C1B		0,16 µg/m³ (A)	b)		1 µg/m³ (E)	8	See also TRGS Metals (in preparation)
Hexavalent chromium							See TRGS Metals (in preparation)
Dimethylnitrosoamin		0,075 µg/m³	b)		0,75 µg/m³	8	See also TRGS 552 (under revision)
Epichlorohydrin	0.6 ppm	2.3 mg/m³	b)	2 ppm	8 mg/m³	2	(2)
Ethylene oxide	0.1 ppm	0.2 mg/m³	b), e)	1 ppm	2 mg/m³	2	See also TRGS 513
Hydrazine	1.7 ppb	2.2 µg/m³	b)	17 ppb	22 µg/m³	2	
4,4'- Methylene dianiline		70 µg/m³	b)		700 µg/m³	8	(1)
Trichloroethene	6 ppm	33 mg/m³	b)	11 ppm	60 mg/m³	8	

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
Acetaldehyd	200-836-8	75-07-0	50	91	1;=2=(I)	AGS, DFG, Y	01/10
Aceton	200-662-2	67-64-1	500	1200	2(I)	AGS, DFG, EU, Y	02/15
Acetonitril	200-835-2	75-05-8	20	34	2(II)	DFG, EU, H, Y	01/06
Acrylaldehyd	203-453-4	107-02-8	0,09	0,2	2(I)	AGS, H	04/07
Acrylsäure	201-177-9	79-10-7	10	30	1(I)	DFG,Y	04/07
Aldrin (ISO)	206-215-8	309-00-2		0,25 E	8(II)	DFG, H	01/06
Allgemeiner Staubgrenzwert (siehe auch Nummer 2.4) Alveolengängige Fraktion Einatembare Fraktion				 1,25 A 10 E	 2(II)	AGS, DFG	02/14
Allylalkohol	203-470-7	107-18-6	2	4,8	2,5(I)	EU, H	01/06
1-(2-(Allyloxy)-2-(2,4-dichlorphenyl)ethyl)-1H-imidazol (Imazalil)	252-615-0	35554-44-0		2 E	2 (II)	H, Y, DFG	09/14
Allylpropyldisulfid	218-550-7	2179-59-1	2	12	1(I)	DFG	01/06
Ameisensäure	200-579-1	64-18-6	5	9,5	2(I)	DFG, EU, Y	01/06
2-Amino-ethanol	205-483-3	141-43-5	2	5,1	2(I)	DFG, EU, H, Y, Sh, 11	07/13
2-(2-Aminoethoxy)ethanol (Diglykolamin)	213-195-4	929-06-6	0,2	0,87	1(I)	DFG, H, Sh, 11	02/15

[35] Bundesministerium für Arbeit und Soziales, 2006, Technische Regeln für Gefahrstoffe, Arbeitsplatzgrenzwerte, TRGS 900 and TGRS 910; Available at: http://www.baua.de/de/Themen-von-A-Z/Gefahrstoffe/TRGS/TRGS-900.html

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
2-Amino-2-methyl-1-propanol (AMP)	204-709-8	124-68-5	1	3,7	2 (II)	DFG, H, Y, 11	09/15
2-Aminonaphthalin-1-sulfonsäure	201-331-5	81-16-3		6 E	4(II)	AGS	01/06
N-(4-Aminophenyl)anilin	202-951-9	101-54-2	0,91	7 E	2 (II)	H, Sh, Y, AGS	09/14
2-Aminopropan	200-860-9	75-31-0	5	12	=2=(I)	DFG, Y	05/09
1-Aminopropan-2-ol (MIPA)	201-162-7	78-96-6	2	5,8	2 (I)	AGS, 11	07/13
Amitrol (ISO)	200-521-5	61-82-5		0,2 E	8(II)	DFG, Y, H	07/13
Ammoniak	231-635-3	7664-41-7	20	14	2(I)	DFG, EU, Y	12/07
Anilin	200-539-3	62-53-3	2	7,7	2(II)	DFG, H, Y, Sh, 11	07/13
Arsin	232-066-3	7784-42-1	0,005	0,016	8(II)	AGS	04/07
Atrazin (ISO)	217-617-8	1912-24-9		1 E	2 (II)	DFG, Y	07/13
Azinphos-methyl (ISO)	201-676-1	86-50-0		0,2 E	8(II)	DFG, H	01/06
Bariumverbindungen, löslich (außer Bariumoxid und Bariumhydroxid)				0,5 E	1(I)	EU, 13, 10, 15	12/07
Baumwollstaub				1,5 E	1(I)	DFG, 4, Y	01/06
Benzothiazol-2-thiol	205-736-8	149-30-4		4 E		DFG, Y	01/06
Benzol-1,2,4-tricarbonsäure-1,2-anhydrid (Rauch)	209-008-0	552-30-7		0,04 A	1(I)	DFG, Sa	12/07
Bis(2-ethylhexyl)phthalat (Diethylhexylphthalat, DEHP)	204-211-0	117-81-7		2 E	2(II)	DFG, H, Y	09/15
2,5-(und 2,6-)Bis(isocyanatomethyl)-bicyclo[2.2.1]heptan	411-280-2		0,005	0,045		AGS	04/07
Bis(2-methoxyethyl)ether	203-924-4	111-96-6	5	28	8(II)	DFG, H, Z	01/06
Bisphenol A	201-245-8	80-05-7		5 E	1(I)	DFG, EU, Y	01/06
Borsäure und Natriumborate	233-139-2	10043-35-3		0,5 E	2 (I)	AGS, Y, 10	09/15
Bortrifluorid	231-569-5	7637-07-2	0,35	1	2 (II)	AGS,Y	04/07
Bortrifluorid-Dihydrat	231-569-5	13319-75-0	0,35	1,5	2 (II)	AGS, Y	05/08
Brommethan	200-813-2	74-83-9	1	3,9	2 (I)	DFG	07/13
Bromtrifluormethan (R 13 B1)	200-887-6	75-63-8	1000	6200	8(II)	DFG, Y	01/06
Brom	231-778-1	7726-95-6		0,7	1(I)	EU; AGS	12/07
Butan	203-448-7	106-97-8	1000	2400	4(II)	DFG	01/06
Butan-1,4-diol	203-786-5	110-63-4	50	200	4(II)	AGS, 11	07/13
Butandion (Diacetyl)	207-069-8	431-03-8	0,02	0,071	1(II)	DFG, H, Sh, Y	09/15
Butan-1-ol	200-751-6	71-36-3	100	310	1(I)	DFG, Y	01/06
Butanon	201-159-0	78-93-3	200	600	1(I)	DFG, EU, H, Y	01/06
Butanonoxim	202-496-6	96-29-7	0,3	1	8 (I)	AGS, Y, H, Sh	07/13
Butan-1-thiol	203-705-3	109-79-5	0,5	1,9	2(II)	DFG, Y	01/06
But-2-in-1,4-diol	203-788-6	110-65-6	0,1	0,36	1(I)	DFG, Sh, H, Y,11	07/13
2-Butoxyethanol	203-905-0	111-76-2	10	49	4(II)	H, Y, AGS	12/11
2-(2-Butoxyethoxy)ethanol	203-961-6	112-34-5	10	67	1,5 (I)	EU, DFG, Y, 11	07/13
2-(2-Butoxyethoxy)ethylacetat	204-685-9	124-17-4	10	67	1,5 (I)	DFG, Y, 11	07/13
2-Butoxyethyl-acetat	203-933-3	112-07-2	20	130	4(II)	DFG, EU, H, Y, 11	07/13
n-Butylacetat	204-658-1	123-86-4	62	300	2 (I)	AGS, Y	07/12
sec-Butylacetat	203-300-1	105-46-4	62	300	2 (I)	AGS, Y	07/12
tert-Butylacetat	208-760-7	540-88-5	42	200	2 (II)	AGS, Y	07/12

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
n-Butylacrylat	205-480-7	141-32-2	2	11	2(I)	DFG, EU, Y	05/09
4-tert-Butylbenzoesäure	202-696-3	98-73-7		2 E	2(II)	DFG, H	01/06
Butylchlorformiat	209-750-5	592-34-7	0,2	1,1	2(I)	DFG, Y	01/06
2,6-Di-tert-butyl-p-kresol	204-881-4	128-37-0		10 E	4 (II)	DFG, Y, 11	07/13

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
tert-Butyl-4-methoxyphenol	246-563-8	25013-16-5		20 E	1 (II)	DFG,Y, 11	07/13
(tert-Butyl)methylether	216-653-1	1634-04-4	50	180	1,5(I)	DFG, EU, Y	01/06
4-tert-Butylphenol	202-679-0	98-54-4	0,08	0,5	2(II)	DFG, H, 11	07/13
Butyraldehyd	204-646-6	123-72-8	20	64	1(I)	AGS	01/06
Calciumcyanamid	205-861-8	156-62-7		1 E	2(II)	DFG, H, Y	07/12
Calciumdihydroxid	215-137-3	1305-62-0		1 E	2 (I)	Y, EU, DFG	09/14
Calciumoxid	215-138-9	1305-78-8		1 E	2 (I)	Y, DFG	09/14
Calciumsulfat	231-900-3	7778-18-9		6 A		DFG	01/06
ε-Caprolactam (Dampf und Staub)	203-313-2	105-60-2		5 E	2(I)	DFG, EU, Y, 11	07/13
Carbaryl (ISO)	200-555-0	63-25-2		5 E	4(II)	DFG, H	01/06
Carbendazim	234-232-0	10605-21-7		10 E	4 (II)	DFG, Z	07/13
Chlor	231-959-5	7782-50-5	0,5	1,5	1(I)	DFG, EU, Y	01/06
Chloralkane, C_{14-17} (Chlorierte Paraffine C_{14-17})	287-477-0	85535-85-9	0,3 E	6 E	8(II)	H, Y, 11, AGS	11/11
Chlorbenzol	203-628-5	108-90-7	10	47	2(II)	DFG, EU, Y	01/06
1-Chlorbutan	203-696-6	109-69-3	25	95,5	1(I)	AGS	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Chlordan (ISO)	200-349-0	57-74-9		0,5 E	8(II)	DFG, H	01/06
1-Chlor-1,1-difluorethan (R 142 b)	200-891-8	75-68-3	1000	4200	8(II)	DFG	01/06
Chlordifluormethan (R 22)	200-871-9	75-45-6		3600		EU, 9	01/06
Chlordioxid	233-162-8	10049-04-4	0,1	0,28	1(I)	DFG	01/06
Chloressigsäure	201-178-4	79-11-8	1	4	1(I)	AGS, H, 11	07/13
Chlorethan	200-830-5	75-00-3	40	110	2(II)	AGS, EU	12/07
2-Chlor-ethanol	203-459-7	107-07-3	1	3,3	1(II)	DFG, H, Y	01/06
Chlormethan	200-817-4	74-87-3	50	100	2(II)	DFG, H, Z	01/06
3-Chlor-1,2-propandiol	202-492-4	96-24-2	0,005	0,023	8 (II)	H, 11, DFG	02/14
Chlorpyriphos (ISO)	220-864-4	2921-88-2		0,2		NL-Experten, H	01/06
Chlortrifluormethan (R 13)	200-894-4	75-72-9	1000	4300	8(II)	DFG	01/06
Chrom und anorganische Chrom(II) und (III)-Verbindungen	231-157-5	7440-47-3		2 E	1(I)	10, EU	12/07
Cryofluoran (R 114)	200-937-7	76-14-2	1000	7100	8(II)	DFG	01/06
Cumol	202-704-5	98-82-8	10	50	4 (II)	H, Y,AGS, EU, DFG	09/14
Cyanamid	206-992-3	420-04-2	0,2	0,35 E	1(II)	DFG,H, Sh, Y, 11, EU	07/13

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
alpha-Cyan-4-fluor-3-phenoxybenzyl-3-(2,2-dichlorvinyl)-2,2-dimethylcyclopropancarboxylat (Cyfluthrin)	269-855-7	68359-37-5		0,01 E	1(I)	DFG, Y	01/06
Cyclohexan	203-806-2	110-82-7	200	700	4(II)	DFG, EU	01/06
Cyclohexanon	203-631-1	108-94-1	20	80	1(I)	AGS, EU, H, Y	01/06
Cyclohexylamin	203-629-0	108-91-8	2	8,2	2 (I)	DFG, Y	07/13
N-Cyclohexylhydroxydiazen-1-oxid, Kaliumsalz		66603-10-9		10 E	2 (II)	H, DFG	09/14
Decaboran	241-711-8	17702-41-9	0,05	0,25	2(II)	DFG, H	01/06
Decahydronaphthalin (Decalin)	202-046-9	91-17-8	5	29	2(II)	DFG, 11	09/15
Demeton		8065-48-3	0,01	0,1		NL-Experten, H	01/06
Demetonmethyl		8022-00-2	0,5	4,8	2(II)	DFG, H	01/06
Diazinon (ISO)	206-373-8	333-41-5		0,1 E	2(II)	DFG, H, Y	01/06
Dibasische Ester (DBE) (Gemische aus Dimethyladipat, Dimethylglutarat und Dimethylsuccinat)			1,2	8	2 (I)	AGS, Y	03/11
Dibenzoylperoxid	202-327-6	94-36-0		5 E	1(I)	DFG	01/06
Dibutylphthalat	201-557-4	84-74-2	0,05	0,58	2 (I)	DFG, Y, 11	07/13
Di-n-butylamin	203-921-8	111-92-2	5	29	1(I)	AGS, H, 6	01/06
1,2-Dichlorbenzol	202-425-9	95-50-1	10	61	2(II)	DFG, EU, H, Y	01/06
1,3-Dichlorbenzol	208-792-1	541-73-1	2	12	2(II)	AGS, Y	05/2010
1,4-Dichlorbenzol	203-400-5	106-46-7	1	6	2(II)	AGS, EU, Y	02/09
2,2'-Dichlor-diethylether	203-870-1	111-44-4	10	59	1(I)	DFG, H	01/06
Dichlordifluormethan (R 12)	200-893-9	75-71-8	1000	5000	2(II)	DFG, Y	01/06
1,1-Dichlorethan	200-863-5	75-34-3	100	410	2(II)	DFG, EU, Y	05/09
1,1-Dichlorethen	200-864-0	75-35-4	2	8	2(II)	DFG, Y	01/06
1,2-Dichlorethylen sym. (cis-[2058597, 156-59-2] und trans-[2058602, 156-60-5])	208-750-2	540-59-0	200	800	2(II)	DFG	01/06
Dichlorfluormethan (R 21)	200-869-8	75-43-4	10	43	2(II)	DFG	01/06
Dichlormethan	200-838-9	75-09-2	50	180	2 (II)	DFG, H, Z	09/15
Dichlormethylbenzol (Isomerengemisch, ringsubstituiert)	249-854-8	29797-40-8	5	30	4(II)	AGS, H	01/06
2,4-Dichlortoluol	202-445-8	95-73-8	5	30	4(II)	AGS, H	01/06
Dichlorvos (ISO)	200-547-7	62-73-7	0,11	1	2(II)	DFG, H, Y	01/06
Dicyclohexylamin	202-980-7	101-83-7	0,7	5	2 (II)	AGS, H, Y, 11	07/13
Dimethylether	204-065-8	115-10-6	1000	1900	8(II)	DFG, EU	01/06
N,N-Dimethylformamid	200-679-5	68-12-2	5	15	2(II)	EU, DFG, AGS , H, Z	11/11
Dimethylglutarat	214-277-2	1119-40-0	1,2	8	2 (I)	AGS, Y, 11	07/13
N,N-Dimethylisopropylamin	213-635-5	996-35-0	1	3,6	2(I)	DFG	01/06
Dimethylpropan	207-343-7	463-82-1	1000	3000	2(II)	DFG, EU	01/06
1,1-Dimethylpropylacetat		625-16-1	50	270	1(I)	DFG, EU	01/06
Dimethylsuccinat	203-419-9	106-65-0	1,2	8	2 (I)	AGS, Y, 11	07/13
1,4-Dioxan	204-661-8	123-91-1	20	73	2(I)	DFG, EU, H, Y	05/09

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Diphenylamin	204-539-4	122-39-4		5 E	2 (II)	DFG, Y, H	07/13
Diphenylether (Dampf)	202-981-2	101-84-8	1	7,1	1(I)	DFG, Y, 11	07/13
Diphosphorpentasulfid	215-242-4	1314-80-3		1	4(I)	EU, 13	12/07
Distickstoffoxid	233-032-0	10024-97-2	100	180	2(II)	DFG, Y	05/09
Disulfiram	202-607-8	97-77-8		2 E	8(II)	DFG, 6	01/06
Dodecan-1-ol (Langkettige Alkohole)	203-982-0	112-53-8	20	155	1(I)	AGS, 11	07/13
Endrin (ISO)	200-775-7	72-20-8		0,05 E	8(II)	DFG, H, Y	07/12
Enfluran	237-553-4	13838-16-9	20	150	8(II)	DFG, Y	01/06
1,2-Epoxybutan (1,2-Butylenoxid)	203-438-2	106-88-7	1	3	2(I)	AGS, Y, H, X	09/15
Essigsäure	200-580-7	64-19-7	10	25	2(I)	DFG, EU, Y	12/07
Essigsäureanhydrid	203-564-8	108-24-7	5	21	1(I)	DFG	01/06
Ethandiol	203-473-3	107-21-1	10	26	2(I)	DFG, EU, H, Y, 11	07/13
Ethanol	200-578-6	64-17-5	500	960	2(II)	DFG, Y	01/06
Ethanthiol	200-837-3	75-08-1	0,5	1,3	2(II)	DFG	01/06
2-Ethoxyethanol	203-804-1	110-80-5	2	7,6	8 (II)	EU, DFG, H, Z	03/11
2-(2-Ethoxyethoxy)ethanol	203-919-7	111-90-0	6	35	2(I)	AGS, Y, 11	07/13
2-Ethoxyethylacetat	203-839-2	111-15-9	2	10,8	8 (II)	EU, DFG, H, Z	03/11
2-Ethoxy-1-methylethylacetat	259-370-9	54839-24-6	50	300	2(II)	DFG, Y, 14	04/07
1-Ethoxypropan-2-ol	216-374-5	1569-02-4	50	220	2(II)	DFG, H, Y, 14	04/07
Ethylacetat	205-500-4	141-78-6	400	1500	2(I)	DFG, Y	01/06
Ethylacrylat	205-438-8	140-88-5	5	21	2(I)	DFG, EU, H, Y	05/09
Ethylamin	200-834-7	75-04-7	5	9,4	=2=(I)	DFG, EU	01/06
Ethylbenzol	202-849-4	100-41-4	20	88	2(II)	DFG, H, Y, EU	07/12
Ethyl-chloracetat	203-294-0	105-39-5	1	5	1(I)	AGS, H	01/06
2,2'-(Ethylendioxy)diethanol (Triethylenglykol)	203-953-2	112-27-6		1000 E	2(II)	DFG, Y, 11	07/13
Ethyl-3-ethoxypropionat	212-112-9	763-69-9	100	610	1(I)	AGS, DFG, H, Y	04/07
Ethylformiat	203-721-0	109-94-4	100	310	1(I)	DFG, H, Y	01/06
2-Ethylhexan-1-ol	203-234-3	104-76-7	10	54	1(I)	DFG, Y, 11	02/15
2-Ethylhexylacetat	203-079-1	103-09-3	10	71	1(I)	DFG, Y, 11	02/15
2-Ethylhexylacrylat	203-080-7	103-11-7	5	38	1(I)	DFG, Sh, Y, 11	07/13
O-Ethyl-O-4-nitrophenylphenylthiophosphonat	218-276-8	2104-64-5		0,5 E	2(II)	DFG, H	01/06
Fenthion (ISO)	200-231-9	55-38-9		0,2 E	2(II)	DFG, H	01/06
Fluor	231-954-8	7782-41-4	1	1,6	2(I)	EU, 13	12/07
Fluoride (als Fluor berechnet)		16984-48-8		1 E	4(II)	DFG, Y, H	12/07
Fluorwasserstoff	231-634-8	7664-39-3	1	0,83	2(I)	DFG, EU, Y, H	12/07
Formaldehyd	200-001-8	50-00-0	0,3	0,37	2(I)	AGS, Sh, Y, X	02/15

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Glutaral	203-856-5	111-30-8	0,05	0,2	2(I)	AGS, Sah, Y	05/2010
Glycerintrinitrat	200-240-8	55-63-0	0,01	0,094	1 (II)	H, Y, DFG	12/11
Glykoldinitrat	211-063-0	628-96-6	0,05	0,32	1(II)	DFG, H, 7, 11	07/13
Halothan	205-796-5	151-67-7	5	41	8(II)	DFG, Z	01/06
Heptachlor (ISO)	200-962-3	76-44-8		0,05 E	8(II)	H, AGS, DFG	12/11
Heptan (alle Isomeren)			500	2100	1(I)	DFG	01/06
Heptan-2-on	203-767-1	110-43-0		238	2(I)	EU, H	01/06
Heptan-3-on	203-388-1	106-35-4	10	47	2(I)	DFG, EU	01/06
Hexachlorcyclopentadien	201-029-3	77-47-4	0,02	0,2		AGS, 11	07/13
Hexachlorethan	200-666-4	67-72-1	1	9,8	2(II)	DFG, 11	07/13
Hexadecan-1-ol (Langkettige Alkohole)	253-149-0	36653-82-4	20	200	1(I)	AGS, 11	07/13
Hexamethylen-1,6-diisocyanat	212-485-8	822-06-0	0,005	0,035	1;=2=(I)	DFG, 11, 12, Sa	07/13
Hexamethylenbis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionat)	252-346-9	35074-77-2		10 E	2 (II)	DFG, Y	07/12
n-Hexan	203-777-6	110-54-3	50	180	8(II)	DFG, EU, Y	01/06
Hexan Isomere (außer n-Hexan) und Methylcyclopen-tan			500	1800	2(II)	DFG	5/2010
1-Hexanol (Langkettige Alkohole)	203-852-3	111-27-3	50	210	1(I)	AGS, 11	07/13
Hexan-2-on	209-731-1	591-78-6	5	21	8(II)	DFG, H	01/06
2-Hexyldecan-1-ol (Langkettige Alkohole)	219-370-1	2425-77-6	20	200	1(I)	AGS	01/06
Hydrogenazid	231-965-8	7782-79-8	0,1	0,18	2(I)	DFG	01/06
Hydrogenbromid	233-113-0	10035-10-6		6,7	1(I)	DFG, EU, 13	12/07
Hydrogenchlorid	231-595-7	7647-01-0	2	3	2(I)	DFG, EU, Y	01/06
Hydrogensulfid	231-977-3	7783-06-4	5	7,1	2(I)	EU, DFG, AGS, Y	03/11
2-(2-(2-Hydroxyethoxy)-ethyl)-2-aza-bicyclo[2.2.1]heptan	407-360-1	116230-20-7	0,5	5		AGS, 11	07/13
4-Hydroxy-4-methyl-pentan-2-on	204-626-7	123-42-2	20	96	2(I)	DFG, H	01/06
Isobutan	200-857-2	75-28-5	1000	2400	4(II)	DFG	01/06
Isobutylacetat	203-745-1	110-19-0	62	300	2 (I)	Y, AGS	07/12
Isobutylchlorformiat	208-840-1	543-27-1	0,2	1,1	2(I)	DFG, Y	01/06
3-Isocyanatmethyl-3,5,5-trimethylcyclohexylisocyanat	223-861-6	4098-71-9	0,005	0,046	1;=2=(I)	DFG, 11, 12, Sa	07/13
o-(p-Isocyanatobenzyl)phenylisocyanat	227-534-9	5873-54-1		0,05	1;=2=(I)	AGS, 11, 12	02/09
Isopentylacetat	204-662-3	123-92-2	50	270	1(I)	DFG, EU	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Isophthalsäure (m-Phthalsäure)	204-506-4	121-91-5		5 E	2(I)	Y, DFG	02/13
Isopren	201-143-3	78-79-5	3	8,4	8 (II)	AGS, X	07/13
Isopropenylacetat	203-562-7	108-22-5	10	46	2(I)	DFG	01/06
2-Isopropoxy-ethanol	203-685-6	109-59-1	5	22	8(II)	DFG, H, Y	01/06
Isotridecan-1-ol (Langkettige Alkohole)	248-469-2	27458-92-0	20	164	1(I)	AGS, 11	07/13
Isovaleraldehyd	209-691-5	590-86-3	10	39	1(I)	AGS	01/06
Kieselglas	262-373-8	60676-86-0		0,3 A		DFG, Y	01/06
Kieselgur, gebrannt	272-489-0	68855-54-9		0,3 A		DFG, Y, 1	05/10
Kieselgur, ungebrannt		61790-53-2		4 E		DFG, Y, 1	01/06
Kieselgut	231-716-3	7699-41-4		0,3 A		DFG, Y	01/06
Kieselrauch	273-761-1	69012-64-2		0,3 A		DFG, Y, 1	05/10
Kieselsäuren, amorphe	231-545-4	7631-86-9		4 E		DFG, 2, Y	01/06
Kohlenstoffdioxid	204-696-9	124-38-9	5000	9100	2(II)	DFG, EU	01/06
Kohlenstoffdisulfid	200-843-6	75-15-0	10	30	2(II)	AGS, EU, H	02/09
Kohlenstoffmonoxid	211-128-3	630-08-0	30	35	2(II)	DFG, Z	07/12
Kohlenstofftetrachlorid	200-262-8	56-23-5	0,5	3,2	2(II)	DFG, H, Y	05/09
Kohlenwasserstoffgemische, Verwendung als Lösemittel (Lösemittelkohlenwasserstoffe), additiv-frei siehe auch Nummer 2.9 Fraktionen (RCP-Gruppen):					2(II)	AGS	12/07
C5-C8 Aliphaten				1500			
C9-C15 Aliphaten				600			
C7-C8 Aromaten				200			
C9-C15 Aromaten				100			
Lithiumhydrid	231-484-3	7580-67-8		0,025 E		EU, 13	12/07
Lithiumverbindungen, anorganische, mit Ausnahme von Lithium und stärker reizenden Lithiumverbindungen				0,2 E	1(I)	Y, 10, DFG	02/15
Malathion (ISO)	204-497-7	121-75-5		15 E	4(II)	DFG	01/06
Maleinsäureanhydrid	203-571-6	108-31-6	0,1	0,41	1;=2=(I)	DFG, Y, Sa, 11	07/13
Mangan und seine anorganischen Verbindungen	231-105-1	7439-96-5		0,02 A, 0,2 E	8(II)	DFG, Y, 10,20	09/15
pMDI (als MDI berechnet)		9016-87-9		0,05 E	1;=2=(I)	DFG, H, Sah, Y, 12	5/2010
Mecrilat	205-275-2	137-05-3	2	9,2	1(I)	DFG	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
(R)-p-Mentha-1,8-dien (D-Limonen)	227-813-5	5989-27-5	5	28	4(II)	DFG, H, Sh, Y	02/13
Mesitylen	203-604-4	108-67-8	20	100	2(II)	DFG, EU, Y	01/06
Methanol	200-659-6	67-56-1	200	270	4(II)	DFG, EU, H, Y	01/06
Methansulfonsäure	200-898-6	75-75-2		0,7	1(I)	AGS, Y, 11	02/15
Methanthiol	200-822-1	74-93-1	0,5	1	2(II)	DFG	01/06
Methoxyessigsäure	210-894-6	625-45-6	5	19	2(I)	DFG, Z	01/06
2-Methoxyethanol	203-713-7	109-86-4	1	3,2	8(II)	DFG, EU, H, Z	05/2010
2-(2-Methoxyethoxy)ethanol	203-906-6	111-77-3	10	50		EU, Y, H, 11	07/13
2-(2-(2-Methoxyethoxy)ethoxy)ethanol	203-962-1	112-35-6		50 E	2 (II)	Y, 11, DFG	07/12
2-Methoxyethylacetat	203-772-9	110-49-6	1	4,9	8(II)	DFG, EU, H, Z	05/2010
(2-Methoxymethylethoxy)propanol (Isomerengemisch)	252-104-2	34590-94-8	50	310	1(I)	DFG, EU, 11	07/13
2-Methoxy-1-methylethylacetat	203-603-9	108-65-6	50	270	1(I)	DFG, EU, Y	01/06
1-Methoxy-2-propanol	203-539-1	107-98-2	100	370	2(I)	DFG, EU, Y	01/06
2-Methoxypropanol	216-455-5	1589-47-5	5	19	8(II)	DFG, H, Z	01/06
2-Methoxypropylacetat	274-724-2	70657-70-4	5	28	8(II)	DFG, H, Z	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Methylacetat	201-185-2	79-20-9	200	610	4(II)	DFG, Y	01/06
Methylacrylat	202-500-6	96-33-3	5	18	1(I)	DFG, EU, H	01/06
Methylamin	200-820-0	74-89-5	10	13	=1=(I)	DFG	01/06
N-Methylanilin	202-870-9	100-61-8	0,5	2,2	2(II)	DFG, H, 6	01/06
2-Methyl-2-azabicyclo[2.2.1]heptan	404-810-9	4524-95-2	5	20		AGS	01/06
Methylbutan	201-142-8	78-78-4	1000	3000	2(II)	DFG, EU	01/06
2-Methylbut-3-en-2-ol	204-068-4	115-18-4	0,6	2	2(I)	AGS	01/06
2-Methylbut-3-in-2-ol	204-070-5	115-19-5	0,9	3	2(I)	AGS	01/06
1-Methylbutylacetat	210-946-8	626-38-0	50	270	1(I)	DFG, EU	01/06
2-Methylbutylacetat	210-843-8	624-41-9	50	270	1(I)	DFG, Y	01/06
Methylchloracetat	202-501-1	96-34-4	1	4,5	1(I)	DFG, H, Y	05/09
Methyl-chlorformiat	201-187-3	79-22-1	0,2	0,78	2(I)	DFG, Y	01/06
Methylcyclohexan	203-624-3	108-87-2	200	810	2(II)	DFG	01/06
Methylcyclohexanol, Techn. Gemisch	247-152-6	25639-42-3	6	28	2(II)	AGS	05/08
Methylcyclopentan	202-503-2	96-37-7	500	1800	2 (II)	DFG	7/10

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
2,2'-Methylendiphenyldiisocyanat	219-799-4	2536-05-2		0,05	1;=2=(I)	AGS, 11, 12	07/13
4,4'-Methylendiphenyldiisocyanat	202-966-0	101-68-8		0,05 E	1;=2=(I)	DFG, 11, 12, H, Sah, Y	07/13
Methylformiat	203-481-7	107-31-3	50	120	4(II)	DFG, H, Y	01/06
5-Methyl-3-heptanon	208-793-7	541-85-5	10	53	2(I)	DFG, EU	01/06
5-Methylhexan-2-on	203-737-8	110-12-3	20	95		EU	01/06
Methylisocyanat	210-866-3	624-83-9	0,01	0,024	1(I)	DFG, EU, H, 12	01/06
Methyl-methacrylat	201-297-1	80-62-6	50	210	2(I)	DFG, EU, Y	01/06
2-Methylpentan	203-523-4	107-83-5	500	1800	2(II)	DFG	07/10
3-Methylpentan	202-481-4	96-14-0	500	1800	2(II)	DFG	07/10
4-Methyl-pentan-2-ol	203-551-7	108-11-2	20	85	1(I)	DFG	01/06
4-Methylpentan-2-on	203-550-1	108-10-1	20	83	2(I)	DFG, EU, H, Y	01/06
4-Methyl-m-phenylendiisocyanat	209-544-5	584-84-9	0,005	0,035	1;=4=(I)	AGS, 11, 12, Sa	07/13
2-Methyl-m-phenylendiisocyanat	202-039-0	91-08-7	0,005	0,035	1;=4=(I)	AGS, 11, 12, Sa	07/13
2-Methylpropan-1-ol	201-148-0	78-83-1	100	310	1(I)	DFG, Y	01/06
2-Methylpropanol-2	200-889-7	75-65-0	20	62	4(II)	DFG, Y	05/09

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
N-Methyl-2-pyrrolidon (Dampf)	212-828-1	872-50-4	20	82	2(I)	EU, DFG, AGS, H, Y, 11, 19	07/13
Methylvinylether	203-475-4	107-25-5	50	120	2(II)	Y, AGS	02/13
Mevinphos (ISO)	232-095-1	7786-34-7	0,01	0,093	2(II)	DFG, H, 11	07/13
Morpholin	203-815-1	110-91-8	10	36	2(I)	DFG, EU, H, 6	01/06
Naled	206-098-3	300-76-5		1 E	2(II)	DFG, AGS, Sh, Y, H	12/07
Naphthalin	202-049-5	91-20-3	0,1	0,5 E	1(I)	AGS, H, Y, 11	03/11
1-Naphthylamin	205-138-7	134-32-7	0,17	1 E	4(II)	AGS, H, 11	07/13
1,5-Naphthylendiisocyanat	221-641-4	3173-72-6		0,05	1;=2=(I)	AGS, 11, 12, Sa	12/07
Natriumazid	247-852-1	26628-22-8		0,2	2(I)	DFG, EU	01/06
Natriumfluoracetat	200-548-2	62-74-8		0,05 E	4(II)	DFG, H, Z	07/12
Nickelmetall	231-111-4	7440-02-0		0,006 A	8(II)	AGS, 10, Sh, Y	09/15
Nikotin	200-193-3	54-11-5		0,5	2(II)	EU, 11, 13, H	07/13
Nitrobenzol	202-716-0	98-95-3		1	2(II)	EU, H	12/07
Nitroethan	201-188-9	79-24-3	100	310	4(II)	DFG	01/06
1-Nitropropan	203-544-9	108-03-2	25	92	4(I)	DFG, H, 3	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Norfluran	212-377-0	811-97-2	1000	4200	8(II)	DFG, Y	01/06
Octadecan-1-ol (Langkettige Alkohole)	204-017-6	112-92-5	20	224	1(I)	AGS	01/06
Octan (alle Isomeren außer Trimethylpentan-Isomere)			500	2400	2(II)	DFG	01/06
Octan-1-ol (Langkettige Alkohole)	203-917-6	111-87-5	20	106	1(I)	AGS, 11	07/13
2-Octyl-2H-isothiazol-3-on	247-761-7	26530-20-1		0,05 E	2(I)	DFG, H, Y	01/06
Orthophosphorsäure	231-633-2	7664-38-2		2 E	2(I)	DFG, EU, AGS, Y	12/07
Oxalsäure	205-634-3	144-62-7		1 E	1(I)	H, EU, 13	12/07
2,2'-Oxydiethanol	203-872-2	111-46-6	10	44	4(II)	DFG, Y, 11	07/13
Oxydipropanol (Dipropylenglykol)	246-770-3	25265-71-8		100 E	2(II)	DFG, H, Y, 11	07/13
Paraquatdichlorid	217-615-7	1910-42-5		0,1 E	1(I)	DFG, H	01/06
Parathion (ISO)	200-271-7	56-38-2		0,1 E	8(II)	DFG, H	01/06
Pentaboran	243-194-4	19624-22-7	0,005	0,013	2(II)	DFG	01/06
Pentacarbonyleisen	236-670-8	13463-40-6	0,1	0,81	2(I)	DFG, H	07/12
Pentan	203-692-4	109-66-0	1000	3000	2(II)	DFG, EU, Y	05/09
Pentan-2,4-dion (Acetylaceton)	204-634-0	123-54-6	30	126	2(II)	AGS, H, Y	12/07

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Pentylacetat	211-047-3	628-63-7	50	270	1(I)	DFG, EU, Y	01/06
3-Pentylacetat		620-11-1	50	270	1(I)	DFG, EU	01/06
Perfluoroctansulfonsäure	217-179-8	1763-23-1		0,01 E	8 (II)	H, Z, DFG	12/11
Phenol	203-632-7	108-95-2	2	8	2(II)	EU, H, 11	07/13
2-Phenoxyethanol	204-589-7	122-99-6	20	110	2(I)	DFG, H, Y, 11	07/13
p-Phenylendiamin	203-404-7	106-50-3		0,1 E	2(II)	DFG, H, Y, 11	07/13
Phenylisocyanat	203-137-6	103-71-9	0,01	0,05	1(I)	AGS, 12, Sa	12/07
Phenylphosphin	211-325-4	638-21-1	0,01	0,05		AGS	01/06
2-Phenylpropen	202-705-0	98-83-9	50	250	2(I)	DFG, EU	01/06
Phosgen	200-870-3	75-44-5	0,1	0,41	2(I)	DFG, EU, AGS, Y	05/09
Phosphin	232-260-8	7803-51-2	0,1	0,14	2(II)	EU, DFG, Y	03/11
Phosphor, weiss/gelb	601-810-2	12185-10-3		0,01 E	2(II)	AGS, Y	05/08
Phosphorpentachlorid	233-060-3	10026-13-8		1 E	1(I)	DFG, EU, 11	07/13
Phosphorpentoxid (als Orthophosphorsäure)	215-236-1	1314-56-3		2 E	2(I)	DFG, AGS, Y	12/07
Phosphortrichlorid	231-749-3	7719-12-2	0,5	2,8	1(I)	DFG, Y	05/09
Phosphoryltrichlorid	233-046-7	10025-87-3	0,2	1,3	1(I)	DFG	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
Piperazin	203-808-3	110-85-0		0,1	1(I)	EU, 6, 11, 13	07/13
Platin (Metall)	231-116-1	7440-06-4		1 E		EU, 13	12/07
Polyalphaolefine		z.B. 68649-12-7		5 A	4(II)	Y, DFG	12/11
Polyethylenglykole (PEG) (mittlere Molmasse 200 – 400)				1000 E	8(II)	DFG, Y	01/06
Polyethylenglykol 600 (PEG 600)				1000 E	8(II)	DFG, Y	01/06
Propan	200-827-9	74-98-6	1000	1800	4(II)	DFG	01/06
Propan-1,2-diyldinitrat	229-180-0	6423-43-4	0,05	0,34	1(II)	DFG, H, 7, 11	07/13
Propan-2-ol	200-661-7	67-63-0	200	500	2(II)	DFG, Y	01/06
Prop-2-in-1-ol	203-471-2	107-19-7	2	4,7	2(I)	DFG, H	01/06
Propionsäure	201-176-3	79-09-4	10	31	2 (I)	EU, DFG, Y	03/11
Propoxur (ISO)	204-043-8	114-26-1		2 E	8(II)	DFG	01/06
Propylenoxid	200-879-2	75-56-9	2	4,8	2 (I)	AGS, X, Y, Sh	07/13
2-(Propyloxy)ethanol	220-548-6	2807-30-9	20	86	2(I)	DFG, H, Y	01/06
(2-Propyloxy)ethylacetat		20706-25-6	20	120	2(I)	DFG, H, Y, 11	07/13

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschrei-tungsfaktor	Bemerkungen	Monat/ Jahr
N-Isopropyl-N'-phenyl-p-phenylendiamin	202-969-7	101-72-4		2 E	2 (II)	DFG, Y, Sh	07/13
Pyrethrum (gereinigter Rohextrakt)	232-319-8	8003-34-7		1 E	1(I)	AGS, EU, Y; Sh für Rohextrakt	12/07
Pyridin-2-thiol-1-oxid, Natriumsalz (Pyrithionnatrium)	223-296-5 240-062-8	3811-73-2 15922-78-8		1 E	2(II)	DFG, H, Z	07/12
Quecksilber	231-106-7	7439-97-6		0,02	8(II)	EU, DFG, , H, Sh	11/11
Quecksilberverbindungen, anorganische				0,02 E	8(II)	EU, DFG, 10, H, Sh	11/11
Salpetersäure	231-714-2	7697-37-2	1	2,6		EU, 13, 16	12/07
Schwefeldioxid	231-195-2	7446-09-5	1	2,5	1(I)	AGS, Y	11/11
Schwefelhexafluorid	219-854-2	2551-62-4	1000	6100	8(II)	DFG	01/06
Schwefelsäure	231-639-5	7664-93-9		0,1 E	1(I)	DFG, EU, Y	11/11
Selen	231-957-4	7782-49-2		0,05 E	1(II)	DFG, Y	12/07
Selenverbindungen, anorganische				0,05 E	1(II)	DFG, Y, 10	12/07
Silber	231-131-3	7440-22-4		0,1 E	8(II)	DFG, EU	01/06
Silberverbindungen, anorganische				0,01 E	2(I)	DFG, EU, 10	01/06
Styrol	202-851-5	100-42-5	20	86	2(II)	DFG, Y	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
Sulfonsäuren, Erdöl-, Calciumsalze	263-093-9	61789-86-4		5 A	4(II)	DFG	09/15
Sulfotep (ISO)	222-995-2	3689-24-5	0,01	0,13	2(II)	DFG, EU, 11, H, Y	07/13
Sulfuryldifluorid	220-281-5	2699-79-8		10		NL-Experten	01/06
Terephthalsäure (p-Phthalsäure)	202-830-0	100-21-0		5 E	2(I)	Y, DFG	02/13
TEPP (ISO)	203-495-3	107-49-3	0,005	0,06	2(II)	DFG, H, 11	07/13
1,1,1,2-Tetrachlor-2,2-difluorethan (R 112a)	200-934-0	76-11-9	200	1700	2(II)	DFG	04/07
Tetrachlor-1,2-difluorethan (R 112)	200-935-6	76-12-0	200	1700	2(II)	DFG	01/06
1,1,2,2-Tetrachlorethan	201-197-8	79-34-5	1	7	2(II)	DFG, H	01/06
Tetrachlorethen (Per)	204-825-9	127-18-4	20	138	2 (II)	H, Y, AGS, EU	12/11
Tetradecanol (Langkettige Alkohole)	204-000-3	112-72-1	20	178	1(I)	AGS, 11	07/13
Tetradecylammoniumbis(1-(5-chlor-2-oxidophenylazo)-2-naphtholato)chromat(1-)	405-110-6	88377-66-6		10 (E)	2(II)	AGS, 18	02/09
Tetraethylblei	201-075-4	78-00-2		0,05	2(II)	DFG, H, Z, 10	05/2010
Tetraethylorthosilikat (TEOS)	201-083-8	78-10-4	1,4	12	1(I)	AGS	5/2010
Tetrahydrofuran	203-726-8	109-99-9	50	150	2(I)	DFG, EU, H, Y	01/06
3a,4,7,7a-Tetrahydro-4,7-methanoinden	201-052-9	77-73-6	0,5	2,7	1(I)	DFG	01/06

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
Tetrahydrothiophen	203-728-9	110-01-0	50	180	1(I)	DFG, Y, H	05/08
Tetramethylblei	200-897-0	75-74-1		0,05	2(II)	DFG, H, Z, 10	05/2010
Tetramethylorthosilikat	211-656-4	681-84-5	0,3	2	1(I)	AGS	01/06
Tetramethysuccinitril		3333-52-6		1	2(II)	AGS	04/07
Thiabendazol	205-725-8	148-79-8		20 E	2(II)	DFG, Y	5/2010
Thiram	205-286-2	137-26-8		1 E	2(II)	DFG, 6, Sh	07/13
Thioglykolate				2 E	2 (II)	DFG, Y, H, Sh	07/13
Toluol	203-625-9	108-88-3	50	190	4(II)	DFG, EU, H, Y	01/06
Tributylphosphat	204-800-2	126-73-8	1	11	2 (II)	DFG, Y, H, 11	07/13
Trichlorbenzol (alle Isomeren außer 1,2,4-Trichlorbenzol)	234-413-4	12002-48-1	5	38	2(II)	DFG, H, Y	05/09
1,2,4-Trichlorbenzol	204-428-0	120-82-1	0,5	3,8	4(II)	AGS, EU	01/06
1,1,1-Trichlorethan	200-756-3	71-55-6	200	1100	1(II)	DFG, EU, H, Y	01/06
1,1,2-Trichlorethan	201-166-9	79-00-5	10	55	2(II)	DFG, H	01/06
Trichlorfluormethan (R 11)	200-892-3	75-69-4	1000	5700	2(II)	DFG, Y	01/06
Trichlormethan (Chloroform)	200-663-8	67-66-3	0,5	2,5	2(II)	DFG, EU, Y, H, X	12/07

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
Trichlor-nitro-methan	200-930-9	76-06-2	0,1	0,68	1(I)	DFG	01/06
1,1,2-Trichlortrifluorethan (R 113)	200-936-1	76-13-1	500	3900	2(II)	DFG	01/06
Triethylamin	204-469-4	121-44-8	1	4,2	2(I)	DFG, EU, H, 6	01/06
Triisobutylphosphat	204-798-3	126-71-6		50	2 (II)	AGS, Sh, 11	07/13
1,2,3-Trimethylbenzol	208-394-8	526-73-8	20	100	2(II)	DFG, EU, Y	01/06
1,2,4-Trimethylbenzol	202-436-9	95-63-6	20	100	2(II)	DFG, EU, Y	01/06
3,5,5-Trimethylcyclohex-2-enon	201-126-0	78-59-1	2	11	2(I)	DFG, Y, H, 11	07/13
2,4,6-Trinitrophenol (Pikrinsäure)	201-865-9	88-89-1		0,1 E	1(I)	H, EU, 13	12/07
Triphenylphosphin	210-036-0	603-35-0		5 E	2 (II)	DFG, Sh, Y	03/11
Vanadiumverbindungen, anorganische, 4+- und 5+wertige (z.B. Divanadiumpentaoxid)	(z.B. 215-239-8)	(z.B. 1314-62-1)		0,005 A, 0,030 E	1(I)	AGS, Y, 10, 21	09/15
Vinylacetat	203-545-4	108-05-4	5	18	2(I)	AGS, EU	12/07
Vinyltoluol (alle Isomeren)	246-562-2	25013-15-4	100	490	2(I)	DFG	01/06
N-Vinyl-2-pyrrolidon		88-12-0	0,01	0,05	2(II)	H, Y, AGS, 11	07/13
Warfarin	201-377-6	81-81-2	0,0016	0,02 E	8 (II)	DFG, H, Z, 11	07/12
Warfarinnatrium	204-929-4	129-06-6		0,02 E	8 (II)	DFG, H, Z	07/12

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
Weißes Mineralöl (Erdöl)	232-455-8	8042-47-5		5 A	4(II)	DFG, Y	09/15
Xylol (alle Isomeren)	215-535-7	1330-20-7	100	440	2(II)	DFG, EU, H	01/06
Zinn(II)-Verbindungen, anorganische				8 E		AGS, 10	12/07
Zinn(IV)-Verbindungen, anorganische				2 E		EU, 13, 10	12/07
Zinnverbindungen, organische							
- n-Butylzinnverbindungen			0,0018	0,009	1 (I)	H, Y, 10, 11, AGS	02/14
Mono-n-butylzinnverbindungen, Di-n-butylzinnverbindungen, Tri-n-butylzinnverbindungen und Tetra-n-butylzinn	215-960-8	1461-25-2					
- Methylzinnverbindungen							
Mono- und Dimethylzinnverbindungen mit Ausnahme der separat genannten			0,0018	0,009	1(I)	AGS, Y, 10, 11	09/15
Triisooctyl-2,2',2"-((methylstannylidin)tris(thio))triacetat, Bis[methylzinndi(isooctylmercaptoacetat)]sulfid, Bis[methylzinndi(2-mercaptoethyloleat)]sulfid	259-374-0	54849-38-6 59118-99-9	0,2	1	2(II)	DFG, Z, 10, 11	09/15

Stoffidentität			Arbeitsplatzgrenzwert		Spitzenbegr.		Änderung
Bezeichnung	EG-Nr.	CAS-Nr.	ml/m³ (ppm)	mg/m³	Überschreitungsfaktor	Bemerkungen	Monat/ Jahr
Diisooctyl-2,2'-((dimethylstannylen)bis(thio))diacetat, 2-Ethylhexyl-10-ethyl-4,4-dimethyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoat, Bis[dimethylzinn(isooctylmercapto-acetat)]sulfid, Bis[dimethylzinn(2-mercaptoethyloleat)]sulfid	247-862-6 260-829-0	26636-01-1 57583-35-4	0,01	0,05	2(II)	DFG, Y, 10, 11	09/15
Trimethylzinnverbindungen und Tetramethylzinn	209-833-6	594-27-4	0,001	0,005	4(II)	DFG, H, 10, 11	09/15
- n-Octylzinnverbindungen			0,002	0,01	2 (II)	H, Y, 10, 11, AGS, DFG	02/14
Mono-n-octylzinnverbindungen, Di-n-octylzinnverbindungen, Tri-n-octylzinnverbindungen und Tetra-n-octylzinn	222-733-7	3590-84-9					
- Phenylzinnverbindungen			0,0004	0,002 E	2 (II)	H, Y, 10, 11, AGS, DFG	09/14
Zirkonium und wasserunlösliche Verbindungen	231-176-9	7440-67-7		1 E	1(I)	10, DFG, Sah	12/07

➢ Ireland[36]

List of Chemical Agents and Occupational Exposure Limit Values (OELVs)

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Acetaldehyde	200-836-8	75-07-0	25	45	25	45	-
Acetic acid	200-580-7	64-19-7	10	25	15	37	IOELV
Acetic anhydride	203-564-8	108-24-7	0.5	2.5	2	10	-
Acetone	200-662-2	67-64-1	500	1210	-	-	IOELV
Acetonitrile	200-835-2	75-05-8	40	70	-	-	Sk, IOELV
Acetophenone	202-708-7	98-86-2	10	49	-	-	-
Acetylene	200-816-9	74-86-2	-	-	-	-	Asphx
Acetylene Dichloride	208-750-2	540-59-0	200	790	250	1000	-
Acetylene Tetrabromide, see 1,1,2,2-Tetrabromoethane							
o-Acetylsalicylic acid, (Aspirin)	200-064-1	50-78-2	-	5	-	-	-
Acrolein	203-453-4	107-02-8	0.1	0.25	0.3	0.8	-
Acrylaldehyde, See Acrolein							
Acrylamide	201-173-7	79-06-1	-	0.03	-	-	Sk, Carc1B, Muta1B
Acrylic acid	201-177-9	79-10-7	2	6			-
Acrylonitrile	203-466-5	107-13-1	2	4.5	-	-	Sk, Carc1B
Adipic acid	204-673-3	124-04-9	-	5	-	-	-
Aldrin (ISO)	206-215-8	309-00-2	-	0.05 (IFV)	-	0.75	Sk
Aliphatic hydrocarbon gases							
Alkanes (C1-C4)							
Butane	203-448-7	106-97-8	1000				-
Ethane	200-814-8	74-84-0	1000				Asphx
Methane	200-812-7	74-82-8	1000				Asphx
Propane	200-827-9	74-98-6	1000				Asphx
Allyl alcohol	203-470-7	107-18-6	2	4.8	5	12.1	Sk, IOELV
Allyl chloride	203-457-6	107-05-1	1	3	2	6	-
Allyl 2,3-epoxypropyl ether	203-442-4	106-92-3	5	22	10	44	-
Allyl glycidyl ether (AGE), see Allyl 2,3-epoxypropyl ether							
Allyl propyl disulphide	218-550-7	2179-59-1	0.5				-
Aluminium alkyl compounds	-	-	-	2	-	-	-
Aluminium metal;	231-072-3	7429-90-5					
			-		-	-	-
			-	1 (R)	-	-	-
			-		-	-	-
Aluminium oxides;	215-691-6	1344-28-1					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Aluminium salts, soluble	-	-	-	2	-	-	-
Aminodimethylbenzene, see Xyldine							
4-Aminodiphenyl	202-177-1	92-67-1	-	-	-	-	Sk, Carc1A
2-Aminoethanol	205-483-3	141-43-5	1	2.5	3	7.6	Sk, IOELV
2-Aminopyridine	207-988-4	504-29-0	0.5	2	2	8	-
3-Amino-1,2,4 Triazole, (Amitrole)	200-521-5	61-82-5	-	0.2	-	-	-
Ammonia, anhydrous	231-635-3	7664-41-7	20	14	50	36	IOELV
Ammonium chloride, fume	235-186-4	12125-02-9	-	10	-	20	-
Ammonium Perflurooctanoate	223-320-4	3825-26-1	-	0.01	-	-	Sk
Ammonium sulphamidate	231-871-7	7773-06-0	-	10	-	20	-
n-Amyl acetate, see Pentyl acetate							
Sec-Amyl acetate, see 1-Methyl butyl acetate							

[36] Health and Safety Authority, **2011**, 2011 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agent) Regulations 2001. S.I. No. 619 of 2001.

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Tert-Amyl acetate	211-047-3	625-16-1	50	270	100	540	IOELV
Aniline	200-539-3	62-53-3	1	3.8	-	-	Sk
o-Anisidine	201-963-1	90-04-0	0.1	0.5	-	-	Sk, Carc1B
p-Anisidine	203-254-2	104-94-9	0.1	0.5	-	-	Sk
Antimony & compounds (as Sb)	231-146-5	7440-36-0	-	0.5	-	-	-
Araldite PT 810, see Triglycidyl isocyanurate, (TGIC)							
Argon	231-147-0	7440-37-1	-	-	-	-	Asphx
Arsenic & compounds except arsine (as As)	231-148-6	7440-38-2	-	0.01	-	-	Carc1A
Arsine	232-066-3	7784-42-1	0.005	0.02	-	-	-
Asbestos,(all types of asbestos fibre, as listed in Directive 2003/18/EC and implemented by S.I. No. 386 0f 2006)							
Crocidolite	2001-28-4		0.1 fibres/cm³ of air				BOELV,Carc1A
Amosite	12172-73-5		0.1 fibres/cm³ of air				BOELV,Carc1A
Chrysotile	12001-29-5		0.1 fibres/cm³ of air				BOELV,Carc1A
Actinolite	77536-66-4		0.1 fibres/cm³ of air				BOELV,Carc1A
Anthophyllite	77536-67-5		0.1 fibres/cm³ of air				BOELV,Carc1A
Tremolite	77536-68-6		0.1 fibres/cm³ of air				BOELV,Carc1A
Asphalt (Bitumen), petroleum fumes, (inhalable fraction)	232-490-9	8052-42-4	-	0.5	-	10	-
Aspirin, see o-Acetylsalicylic acid							
Atrazine (ISO)	217-617-8	1912-24-9	-	10	-	-	-
Azinphos-methyl (ISO), see Guthion							
Aziridine, see Ethylenimine							
Azodicarbonamide (C, C'-azodi(formamide))	204-650-8	123-77-3	-	1	-	3	Sen
Barium compounds, (soluble compounds as Ba)	231-149-1	7440-39-3	-	0.5	-	-	IOELV
Barium sulphate, respirable dust	231-784-4	7727-43-7	-	2	-	-	-
Benomyl (ISO)	241-775-7	17804-35-2	-	10	-	15	-
Benz[α]anthracene	200-280-6	56-55-3	-	-	-	-	Carc1B
Benzene	200-753-7	71-43-2	1	3	-	-	BOELV, Sk, Carc1A
Benzenethiol	203-635-3	108-98-5	0.5	2	-	-	Sk
Benzene-1,2,4-tricarboxylic acid 1,2-anhydride, see Trimelletic anhydride							
Benzidene	202-199-1	92-87-5	-	-	-	-	Sk, Carc1A
Benzo[ß]fluroanthene	205-911-9	205-99-2	-	-	-	-	Carc1B
Benzo[α]pyrene	200-028-5	50-32-8	-	-	-	-	Carc1B, Muta1B, Repr1B
p-Benzoquinone, see Quinone							
Benzoyl peroxide, see Dibenzoyl peroxide							
Benzyl butyl phthalate, see Butyl benzyl phthalate							
Benzyl chloride	202-853-6	100-44-7	0.5	2.6	1.5	7.9	Carc1B
Beryllium and beryllium compounds (as Be)	231-150-7	7440-41-7	-	0.0002	-		Carc1B
γ-BHC (ISO), see γ-Hexachlorocyclohexane							

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Biphenyl	202-163-5	92-52-4	0.2	1.5	0.6	4	-
BCME, see bis(Chloromethyl) ether							
2,2-Bis(p-chlorophenyl)-1,1,1-trichloroethane, see 1,1,1-Trichlorobis (chlorophenyl)ethane							
Bis(2,3-epoxypropyl)ether, see Diglycidyl ether (DGE)							
Bis(2-ethylhexyl) Phthalate, see Di-sec-octyl-phthalate							
2,2Bis(p-methoxyphenyl) -1,1,1-trichloroethane, see Methoxychlor(ISO)							
Bisphenol A (4,4'-isopropylidenediphenol) (Inhalable dust)	201-245-8	80-05-7		10			IOELV
Bismuth telluride	215-135-2	1304-82-1	-	10	-	20	-
Bismuth telluride, selenium-doped	-	-	-	5	-	10	-
Borates, (tetra) sodium							
anhydrous	-	1330-43-4	-	1	-	-	-
decahydrate	-	1303-96-4	-	5	-	-	-
pentahydrate	-	12179-04-3	-	1	-	-	-
Bornan-2-one	200-945-0	76-22-2	2	12	3	18	-
Boron oxide	215-125-8	1303-86-2	-	10	-	20	-
Boron tribromide	233-657-9	10294-33-4	-	-	1	10	-
Boron trifluoride	231-569-5	7637-07-2	-	-	1	3	-
Bromacil (ISO)	206-245-1	314-40-9	1	10	2	20	-
Bromine	231-778-1	7726-95-6	0.1	0.7	0.3	2	IOELV
Bromine pentafluoride	232-157-8	7789-30-2	0.1	0.7	0.3	2	-
Bromochloromethane	200-826-3	74-97-5	200	1050			-
Bromoethane, see Ethyl bromide							
Bromoethylene, see Vinyl bromide							
Bromoform, see Tribromomethane							
Bromomethane	200-813-2	74-83-9	5	20	15	60	Sk
Bromotrifluoromethane, see Trifluorobromomethane							
Buta-1,3-diene	203-450-8	106-99-0	1	2.2	-	-	Carc1A, Muta1B
Butane (see aliphatic hydrocarbon gases)							
Butanethiol	203-705-3	109-79-5	0.5	1.8	-	-	-
Butan-1-ol	200-751-6	71-36-3	20	-			Sk
Butan-2-ol	201-158-5	78-92-2	100	300	150	450	-
Butan-2-one, see Methyl ethyl ketone (MEK)							
trans But-2-enal	204-647-1	123-73-9	2	6	6	18	-
2-Butoxyethanol (EGBE)	203-905-0	111-76-2	20	98	50	246	Sk , IOELV
2-(2-Butoxyethoxy)ethanol	203-961-6	112-34-5	10	67.5	15	101.2	IOELV
2-Butoxyethyl acetate (EGBEA)	203-933-3	112-07-2	20	133	50	333	Sk, IOELV
Butyl acetate	204-658-1	123-86-4	150	710	200	950	-
sec-Butyl acetate	203-300-1	105-46-4	200	950	250	1190	-
tert-Butyl acetate	208-760-7	540-88-5	200	950	250	1190	-
Butyl acrylate	205-480-7	141-32-2	2	11	10	53	IOELV
n-Butyl alcohol, see Butan-1-ol							
sec-Butyl alcohol, see Butan-2-ol							
tert-Butyl alcohol, see 2-Methyl propan-2-ol							
n-Butylamine	203-699-2	109-73-9	-	-	5	15	Sk

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Butyl benzyl phthalate	201-622-7	85-68-7	-	5	-	-	-
n-Butyl chloroformate	209-750-5	592-34-7	1	5.6	-	-	-
tert-Butyl chromate		1189-85-1	-	0.1	-	0.1	-
Butyl-2,3-epoxypropyl ether(BGE)	219-376-4	2426-08-6	25	135	-	-	-
Butyl glycidyl ether, see Butyl-2,3-epoxypropylether							
Butyl lactate	205-316-4	138-22-7	5	25	-	-	-
n-Butyl mercaptan, see Butanethiol							
Tert-Butyl-methyl ether	216-653-1	1634-04-4	50	183.5	100	367	IOELV
2-sec- Butylphenol	201-933-8	89-72-5	5	30	-	-	Sk
p-tert Butyltoluene	202-675-9	98-51-1	1	6.1	-	-	-
Cadmium	231-152-8	7440-43-9	-	0.025	-	-	Carc1B
Cadmium compounds, except cadmium oxide fume and cadmium sulphide pigments (as Cd)	-	7440-43-9	-	0.01 0.002 (R)	-	-	Carc1B
Cadmium oxide fume (as Cd)	215-146-2	1306-19-0	-	0.025	-	0.05	Carc1B
Cadmium sulphide and cadmium sulphide pigments, respirable dust (as Cd)	215-147-8	1306-23-6	-	0.03	-	-	-
Caesium hydroxide	244-344-1	21351-79-1	-	2	-	-	
Calcium carbonate total inhalable dust respirable dust	215-279-6	1317-65-3	 -	 10 4	 -	 -	 - -
Calcium chromate (as Cr)	237-366-8	13765-19-0	-	0.001	-	-	Carc1B
Calcium cyanamide	205-861-8	156-62-7	-	0.5	-	1	-
Calcium hydroxide	215-137-3	1305-62-0	-	5	-	-	IOELV
Calcium oxide	215-138-9	1305-78-8	-	2	-	-	-
Calcium silicate total inhalable dust respirable dust	215-710-8	1344-95-2	- -	 10 4	-	-	-
Calcium sulphate	231-900-3	7778-18-9	-	10	-	-	-
Camphor, synthetic, see Bornan-2-one							
ε-Caprolactam	203-313-2	105-60-2	-	10	-	40	IOELV
Captafol (ISO)	219-363-3	2425-06-1	-	0.1	-	-	Sk, Carc1B
Captan (ISO)	205-087-0	133-06-2	-	5	-	15	-
Carbaryl (ISO)	200-555-0	63-25-2	-	5	-	10	-
Carbofuran (ISO)	216-353-0	1563-66-2	-	0.1	-	-	-
Carbon black	215-609-9	1333-86-4	-	3.5	-	7	-
Carbon dioxide	204-696-9	124-38-9	5000	9000	15000	27000	IOELV
Carbon disulphide	200-843-6	75-15-0	5	15	-	-	Sk, IOELV
Carbon monoxide	211-128-3	630-08-0	20	23	100	115	Repr1A
Carbon tetrabromide	209-189-6	558-13-4	0.1	1.4	0.3	4	-
Carbon tetrachloride	200-262-8	56-23-5	2	12.6	-	-	Sk
Carbonyl chloride, see Phosgene							
Carbonyl fluoride	206-534-2	353-50-4	2	5.4	5	13	-
Catechol	204-427-5	120-80-9	5	20	-	-	-
Cellulose total inhalable dust respirable dust	232-674-9	9004-34-6	 -	 10 4	 -	 20 -	 - -
Cement(Portland) total inhalable dust respirable dust	266-043-4	65997-15-1 - -	 - -	 10 4	 - -	 - -	 - -
Chlordane (ISO)	200-349-0	57-74-9	-	0.5	-	2	Sk

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Chlorinated biphenyls	215-648-1	1336-36-3	-	0.1	-	-	Sk
(42% chlorine)		53469-21-9	-	0.1	-	-	
(54% chlorine)		11097-69-1	-	0.1	-	-	
Chlorine	231-959-5	7782-50-5	-	-	0.5	1.5	IOELV
Chlorine dioxide	233-162-8	10049-04-4	0.1	0.3	0.3	0.9	-
Chlorine trifluoride	232-230-4	7790-91-2	-	-	0.1	0.4	-
Chloroacetaldehyde	203-472-8	107-20-0	-	-	1	3	-
Chloroacetone	201-161-1	78-95-5	1	3.8	1	3.8	Sk
2-Chloroacetophenone	208-531-1	532-27-4	0.05	0.3	-	-	-
Chloroacetyl chloride	201-171-6	79-04-9	0.05	0.2	-	-	-
Chlorobenzene (as monochlorobenzene)	203-628-5	108-90-7	5	23	15	70	IOELV
o-Chlorobenzylidene malonitrile	220-278-9	2698-41-1	0.05	0.39	0.05	0.39	Sk
Chlorobromomethane, see Bromochloromethane							
2-Chlorobuta-1,3-diene, see β-Chloroprene							
Chlorodifluoromethane, see Difluorochloromethane							
Chloroethane, see Ethyl chloride							
2-Chloroethanol, see Ethylene chlorohydrin							
Chloroethylene, see Vinyl chloride							
Chloroform	200-663-8	67-66-3	2	9.8	-	-	Sk, IOELV
Chloromethane	200-817-4	74-87-3	50	105	100	210	-
Bis(Chloromethyl) ether	208-832-8	542-88-1	0.001	0.005			Carc1A
Chloromethyl methyl ether	203-480-1	107-30-2	-	-	-	-	Carc1A
1-Chloro-4-nitrobenzene	202-809-6	100-00-5	-	1	-	2	Sk
1-Chloro-1-nitropropane	209-990-0	600-25-9	2	10	-	-	-
Chloropentafluoroethane	200-938-2	76-15-3	1000	6320	-	-	-
Chloropicrin	200-930-9	76-06-2	0.1	0.7	0.3	2	-
ß-Chloroprene	204-818-0	126-99-8	10	36	-	-	Sk
3-Chloropropene, see Allyl chloride							
o-Chlorostyrene	218-026-8	2039-87-4	50	283	75	425	-
Chlorosulphonic acid	232-234-6	7790-94-5	-	1	-	-	-
α-Chlorotoluene, see Benzyl chloride							
2-Chlorotoluene	202-424-3	95-49-8	50	250	-	-	-
2-Chloro-6-(trichloromethyl) pyridine, see Nitrapyrin							
Chlorpyrifos (ISO)	220-864-4	2921-88-2	-	0.1 (IFV)	-		Sk
Chromium metal	231-157-5	7440-47-3	-	2	-	-	IOELV
Chromium (II) compounds (as Cr)	-	-	-	2	-	-	IOELV
Chromium (III) compounds (as Cr)	-	-	-	2	-	-	IOELV
Chromium (VI) compounds (as Cr)	-	-	-				Carc1B
Water Soluble				0.05			
Insoluble				0.01			
Chromyl Chloride	239-056-8	14977-61-8	0.025	0.16	-	-	Carc1B, Muta1B
Coal dust, respirable dust	-	-	-	1.6	-	-	-
Anthracite	-	-	-	0.4	-	-	-
Bituminous	-	-	-	0.9	-	-	-
Coal tar pitch volatiles, (as cyclohexane solubles)	266-028-2	65996-93-2	-	0.14	-	-	-
Cobalt & cobalt compounds (as Co)	231-158-0	7440-48-4	-	0.1	-	-	Sen

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Copper (as Cu)	231-159-6	7440-50-8					
Fume			-	0.2	-	-	-
Dusts and mists (as Cu)			-	1	-	2	-
Cotton dust (raw or waste cotton)	-	-	-	2.5	-	-	-
Cresols, all isomers	215-293-2	1319-77-3	5	22	-	-	Sk, IOELV
Cristobalite, respirable dust, (see Silica, Crystalline)	238-455-4	14464-46-1		0.1	-	-	-
Crotonaldehyde	224-030-0	4170-30-0			0.3		-
Crufomate	206-083-1	299-86-5	-	5	-	-	-
Cryofluorane, see 1,2-Dichlorotetrafluoroethane							
Cumene, see Isopropylbenzene							
Cyanamide	206-992-3	420-04-2	0.58	1	-	-	Sk, IOELV
Cyanides, except hydrogen cyanide, cyanogen and cyanogen chloride, (as -CN)		57-12-5	-	5	-	-	Sk
Cyanogen	207-306-5	460-19-5	10	20	-	-	-
Cyanogen chloride	208-052-8	506-77-4	-	-	0.3	0.6	-
Cyclohexane	203-806-2	110-82-7	200	700	-	-	IOELV
Cyclohexanol	203-630-6	108-93-0	50	200	-	-	-
Cyclohexanone	203-631-1	108-94-1	10	40.8	20	81.6	Sk, IOELV
Cyclohexene	203-807-8	110-83-8	300	1015	-	-	-
Cyclohexylamine	203-629-0	108-91-8	10	40	-	-	Sk
Cyclonite, see Hexahydro-1,3,5-trinitro-1,3,5 triazine							
Cyclopentadiene	208-835-4	542-92-7	75	203	-	-	-
Cyclopentane	206-016-6	287-92-3	600	1720	-	-	-
Cyhexatin (ISO), see Tricyclohexyltin hydroxide							
2,4-D (ISO), see 2,4-Dichloro-phenoxyacetic acid							
DDM, see 4-4' Diaminodiphenylmethane							
DDT, see 1,1,1-Trichlorobis (chlorophenyl) ethane							
DDVP, see Dichlorvos (ISO)							
Decaborane	241-711-8	17702-41-9	0.05	0.25	0.15	0.75	Sk
Demeton		8065-48-3	0.01	0.05 (IFV)			Sk
2,4-DES, see 2-(2,4-Dichlorophenoxylethyl hydrogen sulphate							
Derris, commercial, see Rotenone							
Diacetone alcohol	204-626-7	123-42-2	50	240	75	360	-
Dialkyl 79 phthalate	-	-	-	5	-	-	-
Diallyl phthalate	205-016-3	131-17-9	-	5	-	-	-
2,2-Diaminodiethylamine, see Diethylene triamine							
4,4-Diaminodiphenyl- methane (DADPM)	202-974-4	101-77-9	0.01	0.08	-	-	Sk Carc1B
1,2-Diaminoethane, see Ethylenediamine							
Diammonium peroxodisulphate (measured as [$S_2O_8^{2-}$]) See Persulphate salts							

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Diatomaceous earth, natural, respirable dust	272-489-0	68855-54-9	-	1.2	-	-	-
Diazinon (ISO)	206-373-8	333-41-5	-	0.01 (IFV)	-		Sk
Diazomethane	206-382-7	334-88-3	0.2	0.4	-	-	Carc1B
Dibenzoyl peroxide	202-327-6	94-36-0	-	5	-	-	-
Dibismuth tritelluride, see Bismuth telluride							
Dibismuth tritelluride, selenium doped, see Bismuth telluride selenium doped							
Diborane	242-940-6	19287-45-7	0.1	0.1	-	-	-
Diboron trioxide, see Boron oxide							
Dibrom, see 1,2 Dibromo-2, 2 dichloro ethyl dimethyl phosphate (Naled)							
1,2 Dibromo-2,2 dichloro ethyl dimethyl phosphate	206-098-3	300-76-5	-	0.1 (IFV)	-	6	-
Dibromodifluoromethane, see Difluorodibromomethane							
1,2 Dibromoethane, see Ethylene dibromide							
2-N-Dibutylaminoethanol	203-057-1	102-81-8	0.5	3.5	-	-	Sk
Dibutyl hydrogen phosphate	203-509-8	107-66-4		5 (IFV)	-	-	-
Dibutyl phenyl phosphate	219-772-7	2528-36-1	0.3	3.5	-	-	Sk
Di-n-butyl phosphate, see Dibutyl hydrogen phosphate							
Dibutyl phthalate	201-557-4	84-74-2	-	5	-	10	Repr1B
6,6'-di-tert-butyl-4,4'-thio-di-m-cresol	202-525-2	96-69-5	-	10 (I)	-	-	-
Dichloroacetylene		7572-29-4	-	-	0.1	0.4	-
1,2 Dichlorobenzene	202-425-9	95-50-1	20	122	50	306	Sk, IOELV
1,4-Dichlorobenzene	203-400-5	106-46-7	20	122	50	306	IOELV
3,3-Dichlorobenzidine	202-109-0	91-94-1	-	-	-	-	Carc1B
1,4-Dichloro-2-butene	212-121-8	764-41-0	0.005	0.025	-	-	Sk, Carc1B
Dichlorodifluoromethane	200-893-9	75-71-8	1000	4950	1250	6200	-
1,3-Dichloro-5,5-dimethyl-hydantoin	204-258-7	118-52-5	-	0.2	-	0.4	-
Dichlorodiphenyltrichloroethane, see 1,1,1'-Trichlorobis (chlorophenyl) ethane							
1,1-Dichloroethane	200-863-5	75-34-3	100	412	-	-	Sk, IOELV
1,2-Dichloroethane	203-458-1	107-06-2	5	20	10	40	Sk, Carc1B
1,1-Dichloroethylene	200-864-0	75-35-4	5	20	-	-	-
1,2-Dichloroethylene (cis:trans isomers 60:40), see Acetylene dichloride							
Dichloroethyl ether	203-870-1	111-44-4	5	29	10	58	Sk
Dichlorofluoromethane	200-869-8	75-43-4	10	40	-	-	-
Dichloromethane	200-838-9	75-09-2	50	174	150	550	Sk
2,2'-Dichloro-4, 4' methylene-dianiline (MbOCA), see 4,4' Methylene bis-(2-chloroaniline)							
1,1-Dichloro-1-nitroethane	209-854-0	594-72-9	2	12	-	-	-
2,4-Dichlorophenoxyacetic acid [2,4-D (ISO)]	202-361-1	94-75-7	-	10	-	20	-

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
2-(2,4-dichlorophenoxy)ethyl hydrogen sulphate and sodium 2-(2,4dichlorophenoxy) ethyl sulphate	205-259-5	149-26-8	-	10	-	20	-
1,3-Dichloropropene, cis and trans isomers	208-826-5	542-75-6	1	5	10	50	Sk
Dichloropropionic acid	200-923-0	75-99-0	1	5.8	-	-	-
1,2-Dichlorotetrafluoroethane	200-937-7	76-14-2	1000	7000	1250	8750	-
Dichlorvos (ISO)	200-547-7	62-73-7	0.1	1	0.3	3	Sk
Dicrotophos	205-494-3	141-66-2	-	0.05 (IFV)	-	-	Sk
Dicyclohexyl phthalate	201-545-9	84-61-7	-	5	-	-	-
Dicyclopentadiene	201-052-9	77-73-6	5	30	-	-	-
Dicyclopentadienyl iron, see Ferrocene							
Dieldrin (ISO)	200-484-5	60-57-1	-	0.25	-	0.75	Sk
Diesel exhaust (particulate) (<0.1µm)	-	-	-	0.15	-	-	-
Diesel fuel/kerosene	-	-	-	100	-	-	-
Diethanolamine	203-868-0	111-42-2	-	1(IFV)	-	-	-
Diethylamine	203-716-3	109-89-7	5	15	10	30	IOELV
2-Diethylaminoethanol	202-845-2	100-37-8	10	50	-	-	Sk
Diethylene glycol	203-872-2	111-46-6	23	100	-	-	-
Diethylene triamine	203-865-4	111-40-0	1	4	-	-	Sk
Diethyl ether, see Ether							
Di-(2-ethylhexyl) phthalate, see Di-sec-octyl-phthalate							
Diethyl ketone, see Pentan-3-one							
Diethyl phthalate	201-550-6		-	5	-	10	-
Diethyl sulphate	200-589-6	64-67-5	0.05	-	-	-	Sk, Carc1B, Muta1B
Difluorochloromethane	200-871-9	75-45-6	1000	3600	-	-	IOELV
Difluorodibromomethane	200-885-5	75-61-6	100	860	150	1290	-
Difluorodichloromethane, see Dichlorodifluoromethane							
Diglycidyl ether (DGE)	218-802-6	2238-07-5	0.01	0.05	-	-	-
Dihydrogen selenide (as Se)	231-978-9	7783-07-5	0.02	0.07	0.05	0.17	IOELV
m-Dihydroxybenzene, see Resorcinol							
o-Dihydroxybenzene, see Catechol							
p-Dihydroxybenzene, see Hydroquinone							
1,2-Dihydroxyethane, see 1,2-Ethane diol							
Diisobutyl ketone	203-620-1	108-83-8	25	150	-	-	-
Diisobutyl phthalate	201-553-2	84-69-5	-	5	-	-	-
Diisodecyl phthalate	247-977-1	26761-40-0	-	5	-	-	-
Diisononyl phthalate	249-079-5	28553-12-0	-	5	-	-	-
Diisooctyl phthalate	248-523-5	27554-26-3	-	5	-	-	-
Diisopropylamine	203-558-5	108-18-9	5	20	-	-	Sk
Diisopropyl ether, see Isopropyl ether							
Di-linear 79 phthalate	-	-	-	5	-	-	-
Dimethoxymethane, see Methylal							
N,N'-Dimethylacetamide	204-826-4	127-19-5	10	36	20	72	Repr1B, Sk, IOELV
Dimethylamine	204-697-4	124-40-3	2	3.8	5	9.4	IOELV

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
N,N-Dimethylaniline	204-493-5	121-69-7	5	25	10	50	Sk
1,3-Dimethylbutyl acetate	203-621-7	108-84-9	50	300	100	600	-
Dimethyl carbamoyl chloride	201-208-6	79-44-7	0.005	0.2	-	-	Carc1B
Dimethyl disulphide	210-871-0	624-92-0	0.5	1.9	-	-	-
Dimethyl ether	204-065-8	115-10-6	1000	1920	-	-	IOELV
N,N-Dimethylethylamine	209-940-8	598-56-1	10	30	15	45	-
Dimethylformamide	200-679-5	68-12-2	5	15	10	30	Sk, Repr1B,IOELV
2,6-Dimethylheptan-4-one, see Di-isobutyl ketone							
Dimethylhydrazine	200-316-0	57-14-7	0.01	0.02	-	-	Carc1B
Dimethyl phthalate	205-011-6	131-11-3	-	5	-	10	-
Dimethyl sulphate	201-058-1	77-78-1	0.1	0.5	0.1	0.5	Sk, Carc1B
Dimethyl sulphide	200-846-2	75-18-3	20	-	-	-	-
Dimethylethoxysilane	238-921-7	14857-34-2	0.5	-	1.5	-	-
Dinitolmide	205-706-4	148-01-6	-	5	-	-	-
Dinitrobenzene, all isomers	246-673-6	25154-54-5	0.15	1	0.5	3	Sk
Dinitro-o-cresol	208-601-1	534-52-1	-	0.2		0.6	Sk
Dinitrotoluene	246-836-1	25321-14-6	-	0.2		5	Carc1B, Sk
Dinonyl phthalate	201-560-0	84-76-4	-	5	-	-	-
1,4-Dioxane, tech. Grade	204-661-8	123-91-1	20	73	-	-	Sk, IOELV
Dioxathion (ISO)	201-107-7	78-34-2	-	0.1 (IFV)	-	-	Sk
1,3-Dioxolane	211-463-5	646-06-0	20	-	-	-	-
Diphenyl, see Biphenyl							
Diphenylamine	204-539-4	122-39-4	-	10	-	20	-
Diphenyl ether (vapour)	202-981-2	101-84-8	1	7	-	-	-
Diphosphorus pentoxide	215-236-1	1314-56-3	-	1	-	-	IOELV
Diphosphorus pentasulphide, see Phosphorus pentasulphide							
Dipotassium peroxodisulphate (measured as [S^2O^8]); see Persulphate salts, potassium							
Dipropylene glycol methyl ether, see (2-Methoxymethyl ethoxy) -1-propanol							
Dipropyl ketone	204-608-9	123-19-3	50	233	-	-	-
Diquat dibromide(ISO)	201-579-4	85-00-7	-	0.5 (I) 0.1 (R)	-		- -
Di-sec-octyl phthalate	204-211-0	117-81-7	-	5	-	10	Repr 1B
Disodium disulphite	231-673-0	7681-57-4	-	5	-	-	-
Disodium peroxodisulphate (measured as S208); see Persulphate salts, sodium							
Disodium tetraborate, anhydrous, decahydrate & pentahydrate, see Borates (tetra) sodium							
Disulfoton (ISO)	206-054-3	298-04-4	-	0.05 (IFV)	-		-
Disulphur dichloride, see Sulphur monochloride							
Disulphur decafluoride	227-204-4	5714-22-7	0.025	0.25	0.01	0.75	-
2,6-Ditertiary-butyl-para- cresol	204-881-4	128-37-0	-	10	-	-	-
Diuron (ISO)	206-354-4	330-54-1	-	10	-	-	-
Divanadium pentaoxide (as V), total inhalable faction	215-239-8	1314-62-1	-	0.05	-	-	-
Divinylbenzene	203-595-7	108-57-6	10	50	-	-	-
DMDT, see Methoxychlor (ISO)							

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Dodecyl mercaptan	203-984-1	112-55-0	0.1	-	-	-	
Dusts non-specific	-	-					
total inhalable			-	10	-	-	-
respirable			-	4	-	-	-
Emery	-	1302-74-5					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Endosulfan (ISO)	204-079-4	115-29-7	-	0.1	-	0.3	Sk
Endrin (ISO)	200-775-7	72-20-8	-	0.1	-	0.3	Sk
Enflurane	237-553-4	13838-16-9	50	380	-	-	-
Epichlorohydrin	203-439-8	106-89-8	0.5	2	1.5	6	Sk, Carc1B
1,2 Epoxy-4-epoxyethylcyclohexane, see Vinylcyclohexene dioxide							
2,3-Epoxypropyl isopropyl ether, see Isopropyl glycidyl ether							
Ethane (see aliphatic hydrocarbon gases)							
Ethane-1,2-diol,	203-473-3	107-21-1					Sk, IOELV
particulate			-	10	-	-	
vapour			20	52	40	104	
Ethanethiol	200-837-3	75-08-1	0.5	1	2	3	-
Ethanol	200-578-6	64-17-5			1000	-	-
Ethanolamine, see 2-Amino ethanol							
Ether	200-467-2	60-29-7	100	308	200	616	IOELV
2-Ethoxyethanol	203-804-1	110-80-5	2	8	-	-	Sk, Repr1B,IOELV
2-Ethoxyethyl acetate	203-839-2	111-15-9	2	11	-	-	Sk, Repr1B,IOELV
Ethyl acetate	205-500-4	141-78-6	200	-	400	-	-
Ethyl acrylate	205-438-8	140-88-5	5	20	10	41	Sk,IOELV
Ethyl alcohol, see Ethanol							
Ethylamine	200-834-7	75-04-7	5	9.4	-	-	IOELV
Ethyl amyl ketone, see 5-Methylheptan-3-one							
Ethylbenzene	202-849-4	100-41-4	100	442	200	884	Sk, IOELV
Ethyl bromide	200-825-8	74-96-4	5	22	-	-	Sk
Ethyl butyl ketone, see Heptan-3-one							
Ethyl chloride	200-830-5	75-00-3	100	268	-	-	IOELV
Ethyl chloroformate	208-778-5	541-41-3	1	4.4	-	-	-
Ethyl cyanoacrylate	230-391-5	7085-85-0	0.2	-	-	-	-
Ethylene	200-815-3	74-85-1	200	-	-	-	Asphx.
Ethylene chlorohydrin	203-459-7	107-07-3	-	-	1	3	Sk
Ethylenediamine	203-468-6	107-15-3	10	25	-	-	Sen
Ethylene dibromide	203-444-5	106-93-4	0.5	4	-	-	Sk, Carc1B
Ethylene dichloride, see 1,2-Dichloroethane							
Ethylene dinitrate, see Ethylene glycol dinitrate							
Ethylene glycol, particulate & vapour, see Ethane-1,2-diol							
Ethylene glycol dinitrate	211-063-0	628-96-6	0.05	0.3			Sk
Ethylene glycol monobutyl ether, see 2-Butoxyethanol							
Ethylene glycol monoethyl ether, see 2-Ethoxyethanol							

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		Notes
			ppm	mg/ m³	ppm	mg/ m³	
Ethylene glycol monomethyl ether acetate, see 2-Methoxyethyl acetate							
Ethylene glycol monomethyl ether, see 2-Methoxyethanol							
Ethylenimine	205-793-9	151-56-4	0.05	0.1	-	-	Sk, Carc 1B, Muta1B
Ethylene oxide	200-849-9	75-21-8	5	10	-	-	Carc1B, Muta1B
Ethyl ether, see Ether							
Ethyl formate	203-721-0	109-94-4	100	300	150	450	-
Ethyl hexanoic acid	205-743-6	149-57-5	-	4	-	-	-
2-Ethylhexyl chloroformate	246-278-9	24468-13-1	1	7.9	-	-	-
Ethylidene dichloride, see 1,1-Dichloroethane							
Ethyl mercaptan, see Ethanethiol							
4-Ethylmorpholine	202-885-0	100-74-3	5	23	20	95	Sk
Ethyl silicate	201-083-8	78-10-4	10	85	30	255	-
Fenchlorphos (ISO), see Ronnel							
Ferbam (ISO)	238-484-2	14484-64-1	-	5	-		-
Ferrovanadium Dust	-	12604-58-9	-	1	-	3	-
Flour dust	-	-	-	1	-	-	Sen
Fluoride (as F)	-	16984-48-8	-	2.5	-	-	-
Fluorides, inorganic	-	-	-	2.5	-	-	IOELV
Fluorine	231-954-8	7782-41-4	1	1.58	2	3.16	IOELV
Fluorodichloromethane, see Dichlorofluoromethane							
Fluorotrichloromethane, see Trichlorofluoromethane							
Formaldehyde	200-001-8	50-00-0	2	2.5	2	2.5	
Formamide	200-842-0	75-12-7	10	18			Repr1B
Formic acid	200-579-1	64-18-6	5	9	-	-	IOELV
2-Furaldehyde (Furfural)	202-627-7	98-01-1	2	8	5	20	Sk
Furfuryl alcohol	202-626-1	98-00-0	5	20	15	60	Sk
Germane	231-961-6	7782-65-2	0.2	0.6	0.6	1.8	-
Germanium tetrahydride, see Germane							
Glutaraldehyde	203-856-5	111-30-8	-	-	0.05	0.2	Sen
Glycerol, mist	200-289-5	56-81-5	-	10	-	-	-
Glycerol trinitrate	200-240-8	55-63-0	0.05	0.5			Sk
Glycidol	209-128-3	556-52-5	2	6	-	-	Carc1B, Repr1B
Glycol mono ethyl ether, see 2-ethoxyethanol							
Grain dust	-	-	-	10	-	-	Sen
Graphite	231-153-3	7440-44-0					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Guthion	201-676-1	86-50-0	-	0.2	-	0.6	Sk
Gypsum		10101-41-4					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Halothane	205-796-5	151-67-7	10	80	-	-	-
γ-HCH (ISO), see γ Hexachlorocyclohexane							
Helium	231-168-5	7440-59-7	-	-	-		Asphx
Hafnium	231-166-4	7440-58-6	-	0.5	-	1.5	-
Heptachlor (ISO)	200-962-3	76-44-8	-	0.05	-		Sk

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Heptachlor epoxide	213-831-0	1024-57-3		0.05			
n-Heptane	205-563-8	142-82-5	500	2085	-	-	IOELV
Heptan-2-one	203-767-1	110-43-0	50	238	100	475	Sk, IOELV
Heptan-3-one	203-388-1	106-35-4	20	95	-	-	IOELV
Hexachlorobutadiene	201-765-5	87-68-3	0.02	0.21	-	-	Sk
γ-Hexachlorocyclohexane	210-168-9	608-73-1	-	0.5	-	1.5	Sk
Hexachlorocyclopentadiene	201-029-3	77-47-4	0.01	0.1	-	-	-
Hexachloroethane vapour	200-666-4	67-72-1	1	10	-	-	-
Hexachloronaphthalene	215-641-3	1335-87-1	-	0.2	-	-	Sk
Hexafluoroacetone	211-676-3	684-16-2	0.1	0.68	-	-	Sk
Hexahydrophthalic anhydride All isomers (Inhalable)	201-604-9 236-086-3 238-009-9	85-42-7 13149-00-3 14166-21-3	-	-	-	0.005	Sen
Hexahydro-1,3,5-trinitro-1,3,5-triazine	204-500-1	121-82-4	0.5		-		Sk
Hexamethylene diisocyanate (as -NCO)	212-485-8	822-06-0	0.005		-		Sen
Hexane, all isomers except n-hexane	-	-	500	1800	1000	3600	-
n-Hexane	203-777-6	110-54-3	20	72	-	-	IOELV
1,6 Hexanediamine	204-679-6	124-09-4	0.5	2.3	-	-	-
1,6 Hexanolactam, dust & vapour: See ε-Caprolactam)							
Hexan-2-one	209-731-1	591-78-6	5	20	-	-	Sk
Hexone, see Methyl isobutyl ketone							
Hexylene glycol	203-489-0	107-41-5			25	125	-
Hydrazine	206-114-9	302-01-2	0.01	0.01	-	-	Sk, Carc1B
Hydrazoic acid (as vapour)	231-965-8	7782-79-8	-	-	0.1	-	-
Hydrogen	215-605-7	1333-74-0	-	-	-	-	Asphx.
Hydrogenated terphenyls	262-967-7	61788-32-7	0.5	4.9	-	-	-
Hydrogen bromide	233-113-0	10035-10-6	-	-	2	6.6	IOELV
Hydrogen chloride	231-595-7	7647-01-0	5	8	10	15	IOELV
Hydrogen cyanide	200-821-6	74-90-8	-	-	10	10	Sk
Hydrogen fluoride (as F)	231-634-8	7664-39-3	1.8	1.5	3	2.5	Sk, IOELV
Hydrogen peroxide	231-765-0	7722-84-1	1	1.5	2	3	-
Hydrogen selenide (as Se), see dihydrogen selenide							
Hydrogen sulphide	231-977-3	7783-06-4	5	7	10	14	IOELV
Hydroquinone	204-617-8	123-31-9		0.5		-	-
4-Hydroxy-4-methyl-pentan-2-one, see Diacetone alcohol							
2-Hydroxypropyl acrylate	213-663-8	999-61-1	0.5	3	-	-	Sk
2,2'-Iminodiethanol, see Diethanol amine							
2,2'-Iminodi (ethylamine), see Diethylene triamine							
Indene	202-393-6	95-13-6	5	24			-
Indium & Compounds (as In)	231-180-0	7440-74-6	-	0.1	-	0.3	-
INN, see 1,2-Dichlorotetrafluoroethane							
Iodine	231-442-4	7553-56-2	-	-	0.1	1	-
Iodoform	200-874-5	75-47-8	0.6	10	1	20	-
Iodomethane, see methyl iodide							
Iron oxide, fume (as Fe)	215-168-2	1309-37-1	-	5	-	10	-

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Iron pentacarbonyl, see Pentacarbonyl iron (as Fe)							
Iron salts (as Fe)	-	-	-	1	-	2	-
Isoamyl acetate, see isopentyl acetate							
Isoamyl alcohol	204-633-5	123-51-3	100	360	125	450	-
Isoamyl methyl ketone	203-737-8	110-12-3	20	95	-	-	Sk, IOELV
Isobutyl acetate	203-745-1	110-19-0	150	700	187	875	-
Isobutyl alcohol	201-148-0	78-83-1	50	150	75	225	-
Isobutyl methyl ketone, see methyl isobutyl ketone							
Isocyanates (all, as -NCO)	-	-	-	0.02	-	0.07	Sen
Isoflurane	247-897-7	26675-46-7	50	380	-	-	-
Isoctyl alcohol (mixed isomers)	248-133-5	26952-21-6	50	270	-	-	-
Isopentyl acetate	204-662-3	123-92-2	50	260	100	520	IOELV
Isophorone, see 3,5,5-trimethyl cyclohex-2-enone							
Isophorone diisocyanate (IPDI) (as -NCO)	223-861-6	4098-71-9	0.005		-		Sen
Isopropoxyethanol	203-685-6	109-59-1	25	106	-	-	Sk
Isopropyl acetate	203-561-1	108-21-4	100	-	200	-	-
Isopropyl alcohol	200-661-7	67-63-0	200	-	400	-	Sk
Isopropylamine	200-860-9	75-31-0	5	12	10	24	-
n-Isopropylaniline	212-196-7	768-52-5	2	11	-	-	Sk
Isopropyl benzene	202-704-5	98-82-8	20	100	50	250	Sk, IOELV
Isopropyl chloroformate	203-563-2	108-23-6	1	5	-	-	-
Isopropyl ether	203-560-6	108-20-3	250	1050	310	1320	-
Isopropyl glycidyl ether (IGE)	223-672-9	4016-14-2	50	240	75	360	-
Kaolin,respirable dust		1332-58-7	-	2	-	-	-
Ketene	207-336-9	463-51-4	0.5	0.9	1.5	3	-
Lead (CAS No.:7439-92-1) and its compounds (except tetraethyl lead); [see Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No.619 of 2001)]]	-	-	-	0.15	-	-	Repr1A, BOELV
Limestone, see Calcium carbonate							
Lindane, see γ hexachlorocyclohexane							
Liquefied petroleum gas (LPG)	270-704-2	68476-85-7	1000	1800	1250	2250	-
Lithium hydride	231-484-3	7580-67-8	-	0.025	-	-	IOELV
Lithium hydroxide	215-183-4	1310-65-2	-	-	-	1	-
Magnesium oxide	215-171-9	1309-48-4					
respirable dust			-	4	-	-	-
fume			-	5	-	10	-
total inhalable dust			-	10	-	-	-
Malathion (ISO)	204-497-7	121-75-5	-	1 (IFV)	-	-	Sk
Maleic anhydride	203-571-6	108-31-6	0.1	-	-	-	Sen
Manganese, fume (as Mn)	231-105-1	7439-96-5	-	0.2	-	3	-
Manganese and compounds (as Mn)	231-105-1	7439-96-5	-	0.2	-	-	-
Manganese cyclopentadienyl tricarbonyl	235-142-4	12079-65-1	-	0.1	-	0.3	Sk

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		Notes
			ppm	mg/ m³	ppm	mg/ m³	
Manganese tetraoxide, see Trimanganese tetraoxide							
Machinemade mineral fibre (excluding refractory ceramic fibres) (MMMF)	-	-	1 fibres per milli litre of air	5	-	-	-
Marble, see Calcium carbonate							
MbOCA, See 4,4'Methylenebis-(2-chloroaniline)							
MDA, see 4-4' – methylenedianiline							
MDI, see 4-4' -methylene-diphenyl diisocyanate							
Mequinol, see 4-methoxyphenol							
Mercaptoacetic acid	200-677-4	68-11-1	1	5	-	-	-
Mercury alkyls (as Hg)	-	-	-	0.01	-	0.03	Sk
Mercury & divalent inorganic mercury compounds	-	7439-97-6	-	0.02	-	-	IOELV
Mesitylene *(also 1,3,5 trimethylbenzene)*	203-604-4	108-67-8	20	100	-	-	IOELV
Mesityl oxide	205-502-5	141-79-7	15	60	25	100	-
Methacrylic acid	201-204-4	79-41-4	20	70	40	140	-
Methacrylonitrile	204-817-5	126-98-7	1	2.8	-	-	Sk
Methane (see aliphatic hydrocarbon gases)							
Methanethiol	200-822-1	74-93-1	0.5	1	-	-	-
Methanol	200-659-6	67-56-1	200	260	-	-	Sk, IOELV
Methomyl (ISO)	240-815-0	16752-77-5	-	2.5	-	-	Sk
Methoxychlor (ISO)	200-779-9	72-43-5	-	10	-	-	-
2-Methoxyethanol	203-713-7	109-86-4	1		-	-	Sk, Repr1B, IOELV
2-(2-Methoxyethoxy)ethanol	203-906-6	111-77-3	10	50.1	-	-	Sk, IOELV
2-Methoxyethyl acetate	203-772-9	110-49-6	1		-	-	Sk, Repr1B,IOELV
2-Methoxy-1-methylethylacetate	203-603-9	108-65-6	50	275	100	550	Sk, IOELV
(2-Methoxymethylethoxy)-l-propanol	252-104-2	34590-94-8	50	308	-	-	Sk, IOELV
4-Methoxyphenol	205-769-8	150-76-5	-	5	-	-	-
1-Methoxypropan-2-ol, see Propylene glycol monomethyl ether							
Methyl acetate	201-185-2	79-20-9	200	610	250	760	-
Methyl acetylene	200-828-4	74-99-7	1000	1610	-	-	-
Methyl acrylate	202-500-6	96-33-3	5	18	10	36	Sk,IOELV
Methylacrylonitrile, see methacrylonitrile							
Methylal	203-714-2	109-87-5	1000	3100	1250	3880	
Methyl alcohol, see Methanol							
Methylamine	200-820-0	74-89-5	5	6	15	19	-
Methyl-n-amyl-ketone, see Heptan-2-one							
N-Methylaniline	202-870-9	100-61-8	0.5	2	-	-	Sk
Methyl bromide, See Bromomethane							
3-Methylbutan-1-ol, see Isoamyl alcohol							
1-Methyl butyl acetate	210-946-8	626-38-0	50	270	100	540	IOELV
Methyl chloride, See Chloromethane							
Methyl chloroform, see 1,1,1-trichloroethane							

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Methyl 2-cyanoacrylate	205-275-2	137-05-3	0.2	1	0.3	1.4	-
Methylcyclohexane	203-624-3	108-87-2	400	1600			-
Methylcyclohexanol	247-152-6	25639-42-3	50	235	75	350	-
2-Methylcyclohexanone	209-513-6	583-60-8	50	230	75	345	Sk
Methylcyclopentadienyl manganese, tricarbonyl (as Mn), see Tricarbonyl (methylcyclopentadienyl) manganese							
2-Methyl-4, 6-dinitrophenol, see Dinitro-o-cresol							
4,4'Methylenebis-(2-chloroaniline)	202-918-9	101-14-4	-	0.005	-	-	Sk, Carc1B
Methylene chloride, see Dichloromethane							
4,4'-Methylene-diphenyl diisocyanate (as —NCO)	202-966-0	101-68-8	-	0.02	-	0.07	Sen
4,4'-Methylenedianiline, see 4, 4' Diaminodiphenyl-methane (DADPM)							
Methyl ethyl ketone (MEK)	201-159-0	78-93-3	200	600	300	900	Sk, IOELV
Methyl ethyl ketone peroxides (MEKP)	215-661-2	1338-23-4	-	-	0.2	1.5	-
Methyl ethyl ketoxime	202-496-6	96-29-7	3	10	10	33	-
Methyl formate	203-481-7	107-31-3	100	250	150	375	Sk
5-Methylheptan-3-one	208-793-7	541-85-5	10	53	20	107	IOELV
5-Methylhexan-2-one, see Isoamyl methyl ketone							
Methylhydrazine	200-471-4	60-34-4	0.01	0.02	-	-	Sk, Carc1B
Methyl iodide	200-819-5	74-88-4	2	11	5	28	Sk
Methyl isoamyl ketone, see Isoamyl methyl ketone							
Methyl isobutyl carbinol	203-551-7	108-11-2	25	100	40	160	Sk
Methyl isobutyl ketone (MIBK)	203-550-1	108-10-1	20	83	50	208	Sk, IOELV
Methyl isocyanate (as -NCO)	210-866-3	624-83-9	-		0.02		Sen, IOELV
Methyl isopropyl ketone	209-264-3	563-80-4	200	705	-	-	-
Methyl mercaptan, see Methanethiol							
Methyl methacrylate	201-297-1	80-62-6	50	-	100	-	IOELV
Methyl parathion, see Parathion-methyl (ISO)							
2-Methylpentane-2,4-diol, see Hexylene glycol							
4-Methylpentan-2-ol, see Methyl isobutyl carbinol							
4-Methylpentan-2-one, see Methyl isobutyl ketone							
4-Methylpent-3-en-2-one, see Mesityl oxide							
4-Methyl-m-phenylene diisocyanate (as -NCO)	-	-	-	0.02	-	0.07	Sen
2-Methylpropan-1-ol, see Iso-butyl alcohol							
2-Methylpropan-2-ol	200-889-7	75-65-0	100	300	150	450	-
Methyl propyl ketone, see Pentan-2-one							
1-Methyl-2-pyrrolidone	212-828-1	872-50-4	10	40	20	80-	Sk, IOELV
Methyl silicate	211-656-4	681-84-5	1	6	5	30	-

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		Notes
			ppm	mg/ m³	ppm	mg/ m³	
α- Methylstyrene, see 2-Phenylpropene							
Methylstyrene, all isomers	246-562-2	25013-15-4	50	242	10	483	-
N-Methyl-N, 2,4,6-tetranitro-aniline, see Tetryl							
Methyl vinyl ketone	201-160-0	78-94-4	0.2	-	-	-	Sk, Sen
Metribuzin	244-209-7	21087-64-9		5	-	-	-
Mevinphos (ISO)	232-095-1	7786-34-7	0.01	0.1	0.03	0.3	Sk
Mica	-	12001-26-2					
total inhalable dust			-	10	-	-	-
respirable dust			-	0.8	-	-	-
Mineral oil	-	-	-		-	-	
Used in Metal working (Inhalable)			0.2				
Pure, Highly & Severely Refined (Inhalable)			5				
Mineral wool	-	-	2 fibres per millilitre of air	5	-	-	-
Molybdenum compounds (as Mo),	231-107-2	7439-98-7		0.5 (R)			
soluble compounds		-	-	10 (I)	-		-
insoluble compounds		-	-	3 (R)	-		-
Monochloracetic acid	201-178-4	79-11-8	0.3	1	-	-	Sk
Monocrotophos	230-042-7	6923-22-4	-	0.25	-	-	Sk
Morpholine	203-815-1	110-91-8	10	36	20	72	Sk, IOELV
Naled (ISO), see 1,2 dibromo-2, 2 dichloro ethyl dimethyl phosphate							
Naphtha (rubber solvent)	232-443-2	8030-30-6			-	-	Carc1B
Naphthalene	202-049-5	91-20-3	10	50	15	75	IOELV
β-Napthylamine	202-080-4	91-59-8	-	-	-	-	Carc1A
1,5-Naphthylene diisocyanate (as –NCO)	221-641-4	3173-72-6	-		-		Sen
Neon	231-110-9	7440-01-9	-	-	-	-	Asphx.
Nickel	231-111-4	7440-02-0	-	0.5	-	-	-
Nickel carbonyl	236-669-2	13463-39-3	0.05	0.12	0.1	0.24	Repr1B
Nickel, inorganic compounds (as Ni)	- -						
soluble compounds			-	0.1	-	-	-
insoluble compounds			-	0.5	-	-	-
Nickel, organic compounds (as Ni)	-	-	-	1	-	3	-
Nicotine	200-193-3	54-11-5	-	0.5	-	-	Sk, IOELV
Nitrapyrin	217-682-2	1929-82-4	-	10	-	20	-
Nitric acid	231-714-2	7697-37-2	-	-	1	2.6	IOELV
Nitric oxide	233-271-0	10102-43-9	25	30	35	45	IOELV
4-Nitroaniline	202-810-1	100-01-6	-	3	-	-	Sk
Nitrobenzene	202-716-0	98-95-3	0.2	1	-	-	Sk, IOELV
4-Nitrodiphenyl	202-204-7	92-93-3	-	-	-	-	Sk, Carc1B
Nitroethane	201-188-9	79-24-3	100	310	-	-	-
Nitrogen	231-783-9	7727-37-9	-	-	-	-	Asphx
Nitrogen dioxide	233-272-6	10102-44-0	3	5	5	9	-
Nitrogen monoxide, See nitric oxide							
Nitrogen trifluoride	232-007-1	7783-54-2	10	30	15	45	-
Nitroglycerine, see Glycerol trinitrate							
Nitromethane	200-876-6	75-52-5	20	50			-
1-Nitropropane	203-544-9	108-03-2	25	90	-	-	-
2-Nitropropane	201-209-1	79-46-9	5	18	-	-	Carc1B

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
2-Nitrotoluene	201-853-3	88-72-2	2	11			Sk
3-Nitrotoluene	202-728-6	99-08-1					
4-Nitrotoluene	202-808-0	99-99-0					
Nitrous oxide	233-032-0	10024-97-2	50	90	-	-	-
Nonane, all isomers	203-913-4	111-84-2	200	1050	-	-	-
Octachloronaphthalene	218-778-7	2234-13-1	-	0.1	-	0.3	Sk
n-Octane	203-892-1	111-65-9	300	1450	375	1800	-
Orthophosphoric acid	231-633-2	7664-38-2	-	1	-	2	IOELV
Osmium tetraoxide (as Os)	244-058-7	20816-12-0	0.0002	0.002	0.0006	0.006	-
Oxalic acid	205-634-3	144-62-7	-	1	-	-	IOELV
Oxalonitrile, see Cyanogen							
2,2'-Oxydiethanol, see Diethylene glycol							
Oxygen difluoride	231-996-7	7783-41-7	0.05	0.11	0.05	0.11	-
Ozone	233-069-2	10028-15-6					
Heavy work			0.05	-	-	-	-
Moderate work			0.08	-	-	-	-
Light work			0.10	-	-	-	-
Heavy, moderate or light workloads (≤2 hrs)			0.20	-	-	-	-
Paracetamol,total inhalable dust	203-157-5	103-90-2	-	10	-	-	-
Paraffin wax, fume	232-315-6	8002-74-2	-	2	-	6	-
Paraquat dichloride (ISO) respirable dust	217-615-7	1910-42-5	-	0.08	-	-	-
Parathion (ISO)	200-271-7	56-38-2	-	0.1	-	0.3	Sk
Parathion-methyl (ISO)	206-050-1	298-00-0	-	0.02 (IFV)	-		Sk
Pentaborane	243-194-4	19624-22-7	0.005	0.01	0.015	0.039	-
Pentachloronapthalene	215-320-8	1321-64-8	-	0.5	-	-	Sk
Pentachloronitrobenzene	201-435-0	82-68-8	-	0.5	-	-	-
Pentacarbonyl iron (as Fe)	236-670-8	13463-40-6	0.01	0.08	-	-	-
Pentachlorophenol	201-778-6	87-86-5	-	0.5	-	1.5	Sk
Pentaerythritol	204-104-9	115-77-5					
total inhalable dust			-	10	-	20	-
respirable dust			-	4	-	-	-
n-Pentane	203-692-4	109-66-0	1000	3000	-	-	IOELV
iso-Pentane	201-142-8	78-78-4					
neo-Pentane	207-343-7	463-82-1					
Pentan-2-one	203-528-1	107-87-9	200	700	250	875	-
Pentan-3-one	202-490-3	96-22-0	200	700	250	875	-
Pentyl acetate	211-047-3	628-63-7	50	270	100	540	IOELV
3-Pentylacetate	211-047-3	620-11-1	50	270	100	540	IOELV
Perchloroethylene, see Tetrachloroethylene							
Perchloromethyl mercaptan	209-840-4	594-42-3	0.1	0.76	-	-	-
Perchloryl fluoride	231-526-0	7616-94-6	3	14	6	28	-
Perfluoroisobutylene		382-21-8	0.01	0.082	0.01	0.082	-
Persulphate salts, inorganic;			-		-	-	-
Ammonium persulphate	231-786-5	7727-54-0		0.1			Sen
Potassium persulphate	231-781-8	7727-21-1		0.1			Sen
Sodium persulphate	231-892-1	7775-27-1		0.1			Sen
Phenacyl chloride, see 2-Chloroacetophenone							
Phenol	203-632-7	108-95-2	2	8	4	16	Sk, IOELV
p-Phenylenediamine	203-404-7	106-50-3	-	0.1	-	-	Sk
Phenyl-2,3-epoxypropyl ether	204-557-2	122-60-1	0.1	0.6	-	-	Carc1B

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Phenylethylene, see Styrene							
Phenyl glycidyl ether, see Phenyl-2,3-epoxypropyl ether							
Phenylhydrazine	202-873-5	100-63-0	0.1	0.44	-	-	Carc1B, Sk
Phenyl mercaptan, see Benzenethiol							
2-Phenylpropene	202-705-0	98-83-9	50	246	100	492	IOELV
Phorate (ISO)	206-052-2	298-02-2	-	0.05	-	0.2	Sk
Phosdrin, see Mevinphos (ISO)							
Phosgene	200-870-3	75-44-5	0.02	0.08	0.1	0.4	IOELV
Phosphine	232-260-8	7803-51-2	0.1	0.14	0.2	0.28	IOELV
Phosphoric acid, see Orthophosphoric acid							
Phosphorus, yellow	231-768-7	7723-14-0	-	0.1	-	0.3	-
Phosphorus, pentachloride	233-060-3	10026-13-8	-	1	-	-	IOELV
Phosphorus pentasulphide	215-242-4	1314-80-3	-	1	-	-	IOELV
Phosphorus trichloride	231-749-3	7719-12-2	0.2	1.5	0.5	3	-
Phosphoryl trichloride	233-046-7	10025-87-3	0.2	1.2	0.6	3.6	-
Phthalic anhydride	201-607-5	85-44-9	-	4	-	12	Sen
Picloram (ISO)	217-636-1	1918-02-1	-	10	-	20	-
Picric acid	201-865-9	88-89-1	-	0.1	-	0.3	Sk, IOELV
Piperazine	203-808-3	110-85-0	-	0.1	-	0.3	Sen, IOELV
Piperazine dihydrochloride	205-551-2	142-64-3	-	0.1	-	0.3	-
Piperidine	203-813-0	110-89-4	1	3.5	-	-	Sk
Plaster of Paris	-	26499-65-0					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Platinum metal	231-116-1	7440-06-4	-	1	-	-	IOELV
Platinum salts, soluble (as Pt)	231-116-1	7440-06-4	-	0.002	-	-	Sen
Polychlorinated biphenyls (PCBs), see Chlorinated biphenyls							
Polyvinyl chloride (PVC)	-	9002-86-2					
total inhalable dust			-	10	-	-	-
respirable dust			-	1	-	-	-
Portland Cement	266-043-4	65997-15-1		1 (R)			
Potassium hydroxide	215-181-3	1310-58-3	-	-	-	2	
Propane (see aliphatic hydrocarbon gases)							
Propane-1,2-diol	200-338-0	57-55-6					
total (vapour and particulates)			150	470	-	-	-
particulates			-	10	-	-	-
1,3-Propane sultone	214-317-9	1120-71-4	-	-	-	-	Carc1B
n-Propanol	200-746-9	71-23-8	100	-	-	-	Sk
Propan-1-ol see n-Propanol							
Propan-2-ol, see Isopropyl alcohol							
Propargyl alcohol, see Prop-2-yn-1-ol							
Propiolactone	200-340-1	57-57-8	0.5	1.5	-	-	Carc1B
Propionic acid	201-176-3	79-09-4	10	31	20	62	IOELV
Propoxur (ISO)	204-043-8	114-26-1	-	0.5	-	2	-
n-Propyl acetate	203-686-1	109-60-4	200	840	250	1050	-
n-Propyl alcohol, see n-Propanol							
Propylene	204-062-1	115-07-1	500	-	-	-	Asphx.
Propylene dinitrate (PGDN)	229-180-0	6423-43-4	0.05	0.3	-	-	Sk
Propylene dichloride	201-152-2	78-87-5	10	46	-	-	-
Propylene glycol, see propane-1,2-diol							

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Propylene glycol dinitrate, see propylene dinitrate							
Propylene glycol monomethyl ether	203-539-1	107-98-2	100	375	150	568	IOELV
Propyleneimine	200-878-7	75-55-8	0.2	-	0.4	-	
Propylene oxide	200-879-2	75-56-9	5	12	-	-	Carc1B, Muta1B
n-Propyl nitrate	210-985-0	627-13-4	25	107	40	172	-
2-Propyn-1-ol	203-471-2	107-19-7	1	2	3	6	Sk
Pulverised fuel ash	-	-					
total inhalable dust			-	10	-	-	-
respirable			-	4	-	-	-
Pyrethrins (ISO)	232-319-8	8003-34-7	-	1	-	-	IOELV
Pyrethrum, see pyrethrins							
Pyridine	203-809-9	110-86-1	5	15	10	30	IOELV
2-Pyridylamine, see 2-Amino pyridine							
Pyrocatechol, see Catechol							
Quartz, respirable dust, (see Silica, crystalline)	238-878-4	14808-60-7	-	0.1	-	-	-
Quinone	203-405-2	106-51-4	0.1	0.4	0.3	1.2	-
RDX, see hexahydro-1,3,5-trinitro-1,3,5-triazine							
Refractory Ceramic Fibres (RCFs)	-	-	-	5mg/m³ (1 fibre/ml)			Carc1B
Resorcinol	203-585-2	108-46-3	10	45	-	-	Sk, IOELV
Rhodium (as Rh),	231-125-0	7440-16-6					
metal fume and dust			-	0.1	-	0.3	-
soluble salts			-	0.001	-	0.003	-
Ronnel	206-082-6	299-84-3	-	5	-	-	-
Rosin core solder pyrolysis products (as airborne total resin acid)	-	-	-	0.05	-	0.15	Sen
Rotenone (ISO)	201-501-9	83-79-4	-	5	-	10	-
Rouge	215-168-2	1309-37-1					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Rubber	-	-					
fume			-	0.6	-	-	-
process dust			-	6	-	-	-
Rubber solvent (naphtha), see Naphtha (rubber solvent)							
Selenium and compounds, except hydrogen selenide(as Se)	231-957-4	7782-49-2	-	0.1	-	-	-
Selenium hexafluoride		7783-79-1	0.05	0.16	-	-	-
Sesone, see Sodium 2-(2,4- dichlorphenoxy) ethyl sulphate							
Silane	232-263-4	7803-62-5	0.5	0.7	1	1.5	-
Silica, amorphous	-	-					
total inhalable dust			-	6	-	-	-
respirable dust			-	2.4	-	-	-
Silica, crystalline, respirable dust, (See Cristobalite, Quartz, Tridymite, Tripoli)	-	-	-	0.1	-	-	-
Silica, fused respirable dust		60676-86-0		0.08	-	-	-
Silicon Si	231-130-8	7440-21-3					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Silicon carbide	206-991-8	409-21-2					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Silicon tetrahydride, see Silane							
Silver (metallic)	231-131-3	7440-22-4	-	0.1	-	-	IOELV
Silver (soluble compounds as Ag)	-	-	-	0.01	-	-	IOELV
Sodium azide (as NaN^3)	247-852-1	26628-22-8	-	0.1	-	0.3	Sk, IOELV
Sodium bisulfite	231-548-0	7631-90-5	-	5	-	-	-
Sodium 2-(2,4- dichlorphenoxy) ethyl sulphate	205-259-5	136-78-7	-	10	-	20	-
Sodium fluoroacetate	200-548-2	62-74-8	-	0.05	-	0.15	Sk
Sodium hydrogensulphite, see Sodium bisulfite							
Sodium hydroxide	215-185-5	1310-73-2	-		-	2	-
Sodium metabisulphite, see Disodium disulphite							
Starch	232-679-6	9005-25-8					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
Stearates (except lead stearate)	-	-	-	10	-	-	-
Stibine		7803-52-3	0.1	0.5	0.3	1.5	-
Stoddard solvent	232-489-3	8052-41-3	100	573	-	-	-
Strontium chromate	232-142-6	7789-06-2	-	0.0005	-	-	Carc1B
Strychnine	200-319-7	57-24-9	-	0.15	-	0.45	-
Styrene	202-851-5	100-42-5	20	85	40	170	-
Subtilisins (proteolytic enzymes as 100% pure cystalline enzyme)	232-752-2	9014-01-1	-	0.00006	-	0.00006	Sen
Sucrose	200-334-9	57-50-1	-	10	-	20	-
Sulphotep (TEDP)(ISO), see 0,0,0',0'-Tetraethyl dithiopyrophosphate(ISO)							
Sulphur dioxide	231-195-2	7446-09-5	0.5	1.3	1	2.6	-
Sulphur hexafluoride	219-854-2	2551-62-4	1000	6000	1250	7500	-
Sulphuric acid 231-639-5	7664-93-9	-	0.05	-	-	IOELV	
Sulphur monochloride	233-036-2	10025-67-9	-	-	1	6	-
Sulphur pentafluoride, see Disulphur decafluoride							
Sulphur tetrafluoride	232-013-4	7783-60-0	0.1	0.4	0.3	1	-
Sulphuryl difluoride	220-281-5	2699-79-8	5	20	10	40	-
Sulprofus	252-545-0	35400-43-2	-	0.1 (IFV)	-	-	-
2,4,5-T (ISO)2,4,5-Trichloro- phenoxyacetic acid)	202-273-3	93-76-5	-	10	-	20	-
TDI, see Toluene diisocyanate							
TEDP(ISO), see 0,0,0',0'-Tetraethyl dithiopyrophosphate							
TEPP (ISO), see 0,0,0',0'-Tetraethyl pyrophosphate							
TNT, see 2,4,6- trinitrotoluene							
Talc	238-877-9	14807-96-6					
total inhalable dust			-	10	-	-	-
respirable dust			-	0.8	-	-	-
Tantalum	231-135-5	7440-25-7	-	5	-	10	-
Tellurium & compounds, except hydrogen telluride, (as Te)	236-813-4	13494-80-9	-	0.1	-	-	-
Temephos	222-191-1	3383-96-8	-	1	-	-	-

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Terephthalic acid	202-830-0	100-21-0	-	10	-	-	-
Terphenyls, all isomers	247-477-3	26140-60-3	-	-	0.5	5	-
1,1,2,2-Tetrabromoethane	201-191-5	79-27-6	0.1 (ifv)		-	-	Sk
Tetrabromomethane, see Carbon tetrabromide							
Tetracarbonylnickel(as Ni), see nickel carbonyl							
1,1,1,2-Tetrachloro-2,2-difluoroethane	200-934-0	76-11-9	100	834	100	834	-
1,1,2,2-Tetrachloro-1,2-difluoroethane	200-935-6	76-12-0	50	417			-
1,1,2,2, Tetrachloroethane	201-197-8	79-34-5	1	6.9	-	-	Sk
Tetrachloroethylene	204-825-9	127-18-4	25	170	100	678	-
Tetrachloromethane, see carbon tetrachloride							
Tetrachloronaphthalenes, all isomers	215-642-9	1335-88-2	-	2	-	4	-
O,O,O',O'- Tetraethyl dithio-pyrophosphate(ISO)	222-995-2	3689-24-5	-	0.1	-	-	Sk, IOELV
O,O,O'O'-Tetraethyl pyrophosphate (ISO)	203-495-3	107-49-3	0.0008	0.01			Sk
Tetraethyl lead	201-075-4	78-00-2	-	0.10	-	-	Sk, Repr1A
Tetraethyl orthosilicate, see Ethyl silicate							
Tetrafluorodichloroethane, see 1,2-Dichlorotetrafluoro-ethane							
Tetrahydrofuran	203-726-8	109-99-9	50	150	100	300	Sk, IOELV
Tetramethyl lead	200-897-0	75-74-1	-	0.15	-	-	Sk
Tetramethyl orthosilicate, see Methyl silicate							
Tetramethyl succinonitrile		3333-52-6	0.5	3	2	9	Sk
Tetranitromethane	208-094-7	509-14-8	0.005	0.040	-	-	-
Tetrasodium pyrophosphate	231-767-1	7722-88-5	-	5	-	-	-
Tetryl	207-531-9	479-45-8	-	1.5	-	3	Sk
Thallium, soluble compounds (as Tl)	231-138-1	7440-28-0	-	0.1	-		Sk
4,4'-Thiobis (6-tert- butyl-m-cresol) , see 6,6'-di-tert-butyl-4,4'-thio-di-m-cresol							
Thioglycollic acid, see Mercapto acetic acid							
Thionyl chloride	231-748-8	7719-09-7	-	-	0.5	2.4	-
Thiram (ISO)	205-286-2	137-26-8	-	0.05 (IFV)	-		-
Tin, as Sn	231-141-8	7440-31-5 & others	-		-		IOELV
Metal				2			
Oxide & inorganic compounds, except tin hydride				2			
Organic compounds				0.1		0.2	
Titanium dioxide	236-675-5	13463-67-7					
total inhalable dust			-	10	-	-	-
respirable dust			-	4	-	-	-
o-Tolidine	204-358-0	119-93-7	-	-	-	-	Sk Carc1B
Toluene	203-625-9	108-88-3	50	192	100	384	Sk, IOELV

Substance			Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		
	EINECS No.	CAS No.	ppm	mg/ m³	ppm	mg/ m³	Notes
Toluene-2,4- or 2,6- diisocyanate (as -NCO)	209-544-5	584-84-9 91-08-7	0.001 (IFV)		0.003 (IFV)		Sen
p-Toluenesulphonyl chloride	202-684-8	98-59-9	-	-	-	5	-
o-Toluidine	202-429-0	95-53-4	0.2	0.9	-	-	Sk Carc1B
m-Toluidine	203-583-1	108-44-1	0.2	0.9	-	-	Sk
p-Toluidine	203-403-1	106-49-0	0.2	0.9	-	-	Sk
1,4,7-Tri-(aza)-heptane, see Diethylene triamine							
Tribromomethane	200-854-6	75-25-2	0.5	5	-	-	Sk
Tributyl phosphate, all isomers	204-800-2	126-73-8	0.2		-		-
Tricarbonyl (etacyclopenta- dienyl) manganese (as Mn), see Manganese cyclopentadienyl tricarbonyl							
Tricarbonyl (methylcyclo-pentadienyl) manganese (as Mn),	235-166-5	12108-13-3	-	0.2	-	0.6	Sk
Trichloroacetic acid	200-927-2	76-03-9	1	5	-	-	-
1,2,4-Trichlorobenzene	204-428-0	120-82-1	2	15.1	5	37.8	Sk, IOELV
1,1,1-Trichlorobis (chlorophenyl) ethane	200-024-3	50-29-3	-	1	-	3	-
1,1,1-Trichloroethane	200-756-3	71-55-6	100	555	200	1110	IOELV
1,1,2-Trichloroethane	201-166-9	79-00-5	10	45	20	90	Sk
Trichloroethylene	201-167-4	79-01-6	10		25		Sk, Carc1B
Trichlorofluoromethane	200-892-3	75-69-4	1000	5600	1250	7000	-
Trichloromethane, see Chloroform							
Trichloronaphthalene	215-321-3	1321-65-9	-	5	-	-	Sk
Trichloronitromethane, see Chloropicrin							
2,4,5-Trichlorophenoxyacetic acid ((2,4,5-T(ISO))	202-273-3	93-76-5	-	10	-	20	-
1,2,3-Trichloropropane	202-486-1	96-18-4	10	60			-
1,1,2-Trichlorotri-fluoroethane	200-936-1	76-13-1	1000	7600	1250	9500	-
Tri-o-cresyl phosphate, see Tri-o-tolyl phosphate							
Tricyclohexyltin hydroxide	236-049-1	13121-70-5	-	5	-	10	-
Tridymite, respirable dust (see Silica, Crystalline)	239-487-1	15468-32-3	-	0.1	-	-	-
Triethanolamine	203-049-8	102-71-6	-	5	-	-	-
Triethylamine	204-469-4	121-44-8	2	8.4	3	12.6	Sk, IOELV
Trifluorobromomethane	200-887-6	75-63-8	1000	6100	1200	7300	-
Triglycidyl isocyanurate, TGIC	219-514-3	2451-62-9	-	0.05	-	-	Muta1B
Trimanganese tetraoxide	215-266-5	1317-35-7	-	0.5	-	-	-
Trimellitic anhydride	209-008-0	552-30-7	-	0.0005	-	0.002	Sen
Trimethylamine	200-875-0	75-50-3	5				-
1,2,3 – Trimethylbenzene	208-394-8	526-73-8	20	100	-	-	Sk, IOELV
1,2,4 – Trimethylbenzene	202-436-9	95-63-6	20	100	-	-	IOELV
Trimethylbenzenes, all isomers or mixtures	247-099-9	25551-13-7	20	100	-	-	Sk, IOELV
3,5,5-Trimethylcyclohex-2-enone	201-126-0	78-59-1	-	-	5	25	-
Trimethyl phosphite	204-471-5	121-45-9	2	10	-	-	-
2,4,6-Trinitrophenol, see Picric acid							
2,4,6-Trinitrotoluene	204-289-6	118-96-7	-	0.1	-	-	Sk
Triorthocresyl phosphate, see Tri-o-tolyl phosphate,							
Triphenylamine	210-035-5	603-34-9	-	5	-	-	-

Substance	EINECS No.	CAS No.	Occupational Exposure Limit Value (8-hour reference period) ppm	Occupational Exposure Limit Value (8-hour reference period) mg/ m³	Occupational Exposure Limit Value (15-minute reference period) ppm	Occupational Exposure Limit Value (15-minute reference period) mg/ m³	Notes
Triphenyl phosphate	204-112-2	115-86-6	-	3	-	6	-
Tripoli, respirable dust (see Silica, Crystalline)		1317-95-9	-	0.1	-	-	-
Tri-o-tolyl phosphate	201-103-5	78-30-8	-	0.1	-	0.3	-
Tungsten & compounds (as W),	231-143-9	7440-33-7					
soluble			-	1	-	3	-
insoluble			-	5	-	10	-
Turpentine	232-350-7	8006-64-2	20	112	150	840	-
Uranium compounds, natural, soluble, (as U)	231-170-6	7440-61-1	-	0.2	-	0.6	-
n-Valeraldehyde	203-784-4	110-62-3	50	176	-	-	-
Vanadium pentoxide, see Divanadium pentaoxide							
Vinyl acetate	203-545-4	108-05-4	5	18	10	35	IOELV
Vinyl benzene, see styrene							
Vinyl bromide	209-800-6	593-60-2	0.5	2.2	-	-	Carc1B
Vinyl chloride(VCM)	200-831-0	75-01-4	3	7.77	-	-	Carc1A, BOELV
4-Vinylcyclohexene	202-848-9	100-40-3	0.1	0.4	-	-	-
4-Vinylcyclohexene dioxide	203-437-7	106-87-6	0.1	0.6	-	-	-
Vinyl fluoride	200-832-6	75-02-5	1	-	-	-	-
Vinylidene chloride, see 1,1-Dichloroethylene							
Vinylidene fluoride	200-867-7	75-38-7	500	-	-	-	-
Vinyl pyrrolidone	201-800-4	88-12-0	-	0.05	-	-	
Vinyl toluene, all isomers, see Methylstyrene							
VM and P Naptha	232-453-7	8032-32-4			-	-	Carc1B
Warfarin (ISO)	201-377-6	81-81-2	-	0.1	-	0.3	Repr1A
Welding fume	-	-	-	5	-	-	-
White spirit, see Stoddard solvent							
Wood dust, (soft wood)	-	-	-	5	-	-	Sen
Wood dust, (hard wood)	-	-	-	5	-	-	Sen, BOELV
Xylene, mixed isomers	215-535-7	1330-20-7	50	221	100	442	Sk, IOELV
Xylene, o-isomer	202-422-2	95-47-6	50	221	100	442	Sk, IOELV
Xylene m-isomer	203-576-3	108-38-3	50	221	100	442	Sk, IOELV
Xylene p-isomer	203-396-5	106-42-3	50	221	100	442	Sk, IOELV
Xylidine, all isomers	215-091-4	1300-73-8	0.5 (IFV)	2.5			Sk
Yttrium	231-174-8	7440-65-5	-	1	-	3	-
Zinc chloride, fume	231-592-0	7646-85-7	-	1	-	2	-
Zinc chromates	236-878-9	13530-65-9	-	0.01	-	-	Carc1A
Zinc distearate	209-151-9	557-05-1					
total inhalable dust			-	10	-	20	-
respirable dust			-	4	-	-	-
Zinc oxide, fume	215-222-5	1314-13-2	-	2 (R)	-	10	-
Zirconium compounds (as Zr)	231-176-9	7440-67-7	-	5	-	10	-

- **Italy**[37]

EINECS (1)	CAS (2)	NOME DELL'AGENTE CHIMICO	VALORE LIMITE				NOTAZIONE (3)
			8 ore (4)		Breve Termine (5)		
			mg/m³ (6)	ppm (7)	mg/m³ (6)	ppm (7)	
200-467-2	60-29	Dietiletere	308	100	616	200	
200-662-2	67-64-1	Acetone	1210	500	-	-	-
200-663-8	67-66-3	Cloroformio	10	2	-	-	Pelle
200-756-3	71-55-6	Tricloroetano, 1,1,1-	555	100	1110	200	-
200-834-7	75-04-7	Etilammina	9,4	5	-	-	-
200-863-5	75-34-3	Dicloroetano, 1,1-	412	100	-	-	Pelle
200-870-3	75-44-5	Fosgene	0,08	0,02	0,4	0,1	-
200-871-9	75-45-6	Clorodifluorometano	3600	1000	-	-	-
201-159-0	78-93-3	Butanone	600	200	900	300	-
201-176-3	79-09-4	Acido propionico	31	10	62	20	-
202-422-2	95-47-6	o-Xilene	221	50	442	100	Pelle
202-425-9	95-50-1	Diclorobenzene, 1, 2-	122	20	306	50	Pelle
202-436-9	95-63-6	Trimetilbenzene, 1, 2, 4	100	20	-	-	-
202-704-5	98-82-8	Cumene	100	20	250	50	Pelle
202-705-0	98-83-9	Fenilpropene, 2-	246	50	492	100	-
202-849-4	100-41-4	Etilbenzene	442	100	884	200	Pelle
203-313-2	105-60-2	e-Caprolattame (polveri e vapori) (8)	10	-	40	-	-
203-388-1	106-35-4	Eptan-3-one	95	20	-	-	-
203-396-5	106-42-3	p-Xilene	221	50	442	100	Pelle
203-400-5	106-46-7	Diclorobenzene, 1,4-	122	20	306	50	-
203-470-7	107-18-6	Alcole allilico	4,8	2	12,1	5	Pelle
203-473-3	107-21-1	Etilen glicol	52	20	104	40	Pelle
203-539-1	107-98-2	Metossipropanolo-2,1-	375	100	568	150	Pelle
203-550-1	108-10-1	Metilpentan-2-one,4-	83	20	208	50	-
203-576-3	108-38-3	m-Xilene	221	50	442	100	Pelle
203-603-9	108-65-6	2-Metossi-1-metiletilacetato	275	50	550	100	Pelle
203-604-4	108-67-8	Mesitilene (1,3,5-trimetilbenzene)	100	20	-	-	-
203-628-5	108-90-7	Clorobenzene	47	10	94	20	-
203-631-1	108-94-1	Cicloesanone	40,8	10	81,6	20	Pelle
203-632-7	108-95-2	Fenolo	7,8	2	-	-	Pelle
203-726-8	109-99-9	Tetraidrofurano	150	50	300	100	Pelle
203-737-8	110-12-3	5-metilesan-2-one	95	20	-	-	-
203-767-1	110-43-0	eptano-2-one	238	50	475	100	Pelle
203-808-3	110-85-.0	Piperazina (polvere e vapore) (8)	0,1	-	0,3	-	-
203-905-0	111-76-2	Butossietanolo-2	98	20	246	50	Pelle
203-933-3	112-07-2	2-Butossietilacetato	133	20	333	50	Pelle
204-065-8	115-10-6	Etile dimetilico	1920	1000	-	-	-
204-428-0	120-82-1	1,2,4-Triclorobenzene	15,1	2	37,8	5	Pelle
204-469-4	121-44-8	Trietilammina	8,4	2	12,6	3	Pelle
204-662-3	123-92-2	Acetato di isoamile	270	50	540	100	-
204-697-4	124-40-3	Dimetilammina	3,8	2	9,4	5	
204-826-4	127-19-5	N,N-Dimetilacetammide	36	10	72	20	Pelle
205-480-7	141-32-2	Acrilato di n-butile	11	2	53	10	-
205-563-8	142-82-5	Eptano, n-	2085	500	-	-	-
208-394-8	526-73-8	1,2,3-Trimetilbenzene	100	20	-	-	-
208-793-7	541-85-5	5-Metileptano-3-one	53	10	107	20	-
210-946-8	626-38-0	Acetato di 1-metilbutile	270	50	540	100	-
211-047-3	628-63-7	Acetato di pentile	270	50	540	100	-
	620-11-1	Acetato di 3-amile	270	50	540	100	-
	625-16-1	Acetato di terz-amile	270	50	540	100	-
215-535-7	1330-20-7	Xilene, isomeri misti, puro	221	50	442	100	Pelle
222-995-2	3689-24-5	Sulfotep	0,1	-	-	-	Pelle
231-634-8	7664-39-3	Acido fluoridrico	1,5	1,8	2,5	3	-
231-131-3	7440-22-4	Argento, metallico	0,1	-	-	-	-
231-595-7	7647-01-0	Acido cloridrico	8	5	15	10	-
231-633-2	7664-38-2	Acido ortofosforico	1	-	2	-	-

[37] Ministero del Lavoro e delle Politiche Sociali – Ministero della Salute, **2008**, Criteri di qualificazione della figura del formatore per la salute e sicurezza sul lavoro, articolo 6, comma 8, lett. m-bis, del Decreto Legislativo n. 81/2008 e s.m.i., Allegato XXXVIII.

EINECS (1)	CAS (2)	NOME DELL'AGENTE CHIMICO	VALORE LIMITE				NOTAZIONE (3)
			8 ore (4)		Breve Termine (5)		
			mg/m³ (6)	ppm (7)	mg/m³ (6)	ppm (7)	
231-635-3	7664-41-7	Ammoniaca anidra	14	20	36	50	-
231-945-8	7782-41-4	Fluoro	1,58	1	3,16	2	-
231-978-9	7782-41-4	Seleniuro di idrogeno	0,07	0,02	0,17	0,05	-
233-113-0	10035-10-6	Acido bromidrico	-	-	6,7	2	-
247-852-1	26628-22-8	Azoturo di sodio	0,1	-	0,3	-	Pelle
252-104-2	*34590-94-8*	*(2-Metossimetilotossi)-propanolo*	*308*	*50*	-	-	*Pelle*
		Fluoruri inorganici (espressi come F)	2,5	-	-	-	-
		Piombo inorganico e suoi composti	0,15	-	-	-	-
200-193-3	54-11-5	Nicotina	0,5	—	—	—	Pelle
200-579-1	64-18-6	Acido formico	9	5	—	—	—
200-659-6	67-56-1	Metanolo	260	200	—	—	Pelle
200-830-5	75-00-3	Cloroetano	268	100	—	—	Pelle
200-835-2	75-05-8	Acetonitrile	35	20	—	—	Pelle
201-142-8	78-78-4	Isopentano	2 000	667	—	—	—
202-716-0	98-95-3	Nitrobenzene	1	0,2	—	—	Pelle
203-585-2	108-46-3	Resorcinolo	45	10	—	—	Pelle
203-625-9	108-88-3	Toluene	192	50	—	—	Pelle
203-628-5	108-90-7	Monoclorobenzene	23	5	70	15	—
203-692-4	109-66-0	Pentano	2 000	667	—	—	—
203-716-3	109-89-7	Dietilammina	15	5	30	10	—
203-777-6	110-54-3	n-Esano	72	20	—	—	—
203-806-2	110-82-7	Cicloesano	350	100	—	—	—
203-815-1	110-91-8	Morfolina	36	10	72	20	Pelle
203-906-6	111-77-3	2-(2-Metossietossi)etanolo	50,1	10	—	—	Pelle
203-961-6	112-34-5	2-(2-Butossietossi)etanolo	67,5	10	101,2	15	—
204-696-9	124-38-9	Anidride carbonica	9 000	5 000	—	—	—
205-483-3	141-43-5	2-Amminoetanolo	2,5	1	7,6	3	Pelle
205-634-3	144-62-7	Acido ossalico	1	—	—	—	—
206-992-3	420-04-2	Cianammide	1	—	—	—	Pelle
207-343-7	463-82-1	Neopentano	3000	1000	—	—	—
215-236-1	1314-56-3	Pentaossido di fosforo	1	—	—	—	—
215-242-4	1314-80-3	Pentasolfuro di difosforo	1	—	—	—	—
231-131-3		Argento (composti solubili come Ag)	0,01	—	—	—	—
		Bario (composti solubili come Ba)	0,5	—	—	—	—
		Cromo metallico, composti di cromo inorganico (II) e composti di cromo inorganico (III) (non solubili)	0,5	—	—	—	—
231-714-2	7697-37-2	Acido nitrico	—	—	2,6	1	—
231-778-1	7726-95-6	Bromo	0,7	0,1	—	—	—
231-959-5	7782-50-5	Cloro	—	—	1,5	0,5	—
232-260-8	7803-51-2	Fosfina	0,14	0,1	0,28	0,2	—
	8003-34-7	Piretro (depurato dai lattoni sensibilizzanti)	1	—	—	—	—
233-060-3	10026-13-8	Pentacloruro di fosforo	1	—	—	—	—

(1) EINECS: Inventario europeo delle sostanze chimiche esistenti a carattere commerciale.
(2) CAS: Chemical Abstract Service Registry Number (Numero del registro del Chemical Abstract Service).
(3) Notazione cutanea attribuita ai LEP che identifica la possibilità di un assorbimento significativo attraverso la Pelle.
(4) Misurato o calcolato in relazione ad un periodo di riferimento di otto ore, come media ponderata.
(5) Un valore limite al di sopra del quale l'esposizione non deve avvenire e si riferisce ad un periodo di 15 minuti, salvo indicazione contraria.
(6) mg/m^3 : milligrammi per metro cubo di aria a 20 °C e 101,3 kPa.
(7) ppm: parti per milione nell'aria (ml/m^3).

- **Netherlands**[38]

Agens	Advies-waarde	Termijn[2]	Eenheid	Paragraaf
Chemische agentia				
1,1,1,- Trichloorethaan	380		µg/m^3	2.2.4
1,2-Dichloorethaan	48		µg/m^3	2.2.4
1,2-Dichloorpropaan	12		µg/m^3	2.2.4.
1,4-Dichloorbenzeen	670		µg/m^3	2.2.5
Alkanen[3]: Som van pentaan, heptaan, octaan	18400		µg/m^3	2.2.3
Alkanen; Hogere alkanen (nonaan en hoger)	1000		µg/m^3	2.2.3
Alkylbenzenen[4]: Som van Isopropylbenzeen, Trimethylbenzeen, Methylethylbenzeen, n-Propylbenzeen, n-butylbenzeen	870		µg/m^3	2.2.1
Alkyldimethylbenzyl-ammoniumchloride	-			2.3
Abest	100.000		ve/m^3	2.5
Benzeen	20		µg/m^3	2.2.1
Chloorbenzeen	500		µg/m^3	2.2.5
Chloorpyrifos	3		µg/m^3	2.3
Cyclohexaan	3000		µg/m^3	2.2.3
Dichloormethaan	3000		µg/m^3	2.2.4
Didecyldimethyl- ammoniumchloride	-			2.3
Ethylbenzeen	770		µg/m^3	2.2.1
Fijn stof (PM_{10})	-			2.1.
Formaldehyde[5]	1,2		µg/m^3	2.2.2
Foxim	-			2.3
HABS[6]	800		µg/m^3	2.2.1
Hexaan	200		µg/m^3	2.2.3
Kooldioxode (CO_2)	-			5.1
Koolmonoxide (CO)	100 60 30 10	15 minuten 30 minuten 1 uur 8 uur	mg/m^3 mg/m^3 mg/m^3 mg/m^3	2.1
Kwikdamp	50	jaargemiddelde	ng/m^3	2.4
Lood	500	jaargemiddelde	ng/m^3	2.4
Minerale vezels	100.000	jaargemiddelde	ve/m^3	2.5
Ozon	120	8 uur	µg/m^3	2.1
PAK	1,2		ng B(a)P/m^3	2.1
Propoxur	22		µg/m^3	2.3
Stikstofdioxide (NO_2)	200 40	1 uur jaargemiddelde	µg/m^3 µg/m^3	2.1
Styreen	900		µg/m^3	2.2.1
Tetrachlooretheen (per)	250		µg/m^3	2.2.4
Tetramethrin	-			2.3

[38]Minister van Sociale Zaken en Werkgelegenheid, **2016**, Arbeidsomstandighedenregeling. Available at http://wetten.overheid.nl/BWBR0008587/20160401/0/afdrukken

Agens	Advies-waarde	Termijn[2]	Eenheid	Paragraaf
Tolueen	400		$\mu g/m^3$	2.2.1
Trichloorbenzeen	50		$\mu g/m^3$	2.2.5
Trichlooretheen (tri)	200		$\mu g/m^3$	2.2.4
Trichloorfon	-			2.3
Trichloormethaan (chloroform)	100		$\mu g/m^3$	2.2.4
Xyleen	870		$\mu g/m^3$	2.2.1
Zwaveldioxide (SO_2)	500 125 50	10 minuten 24uur jaargemiddelde	$\mu g/m^3$ $\mu g/m^3$ $\mu g/m^3$	2.1
Fysische agentia/ventilatie				
Geluid	35 30	Dag: 16 uur Nacht: 8 uur	LAEq (dB) LAEq (dB)	3.3
NIS (Niet Ioniserende Straling)	-			3.3.2.
Radon	-			3.3.1
Temperatuur	-			3.1
Ventilatie	-			5.2
Ventilatievoud	-			5.2
Vocht	-			3.2
Biologische agentia				
Schimmels	-			4.1
Schimmelcomponenten				4.2
ß(1→3)-glucanen	-			4.2.1.
Allergenen	-			4.2.2.
Mycotoxinen	-			4.2.3.
Microbiële VOC's	-			4.2.4.
Bacteriën	-			4.3.
Bacteriële componenten				4.4
Endotoxinen	-			4.4.1
Peptidoglycanen	-			4.4.2
Huisstofmijtallergenen	-			4.5.
Huisdier- en kakkerlak allergenen	-			4.6.

➢ Spain[39]

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
		Aceite mineral refinado, nieblas		5		10	am	
		Aceite vegetal, nieblas		10			a, véase Apartado 9	
200-836-8	75-07-0	Acetaldehido			25	46		12-36/37-40
211-047-3	628-63-7	Acetato de n-amilo	50	270	100	540	VLI	10-66
210-946-8	626-38-0	Acetato de sec-amilo	50	270	100	540	VLI	10-66
	625-16-1	Acetato de terc-amilo	50	270	100	540	VLI	
205-399-7	140-11-4	Acetato de bencilo	10	62				
204-658-1	123-86-4	Acetato de n-butilo	150	724	200	965		10-66-67
203-300-1	105-46-4	Acetato de sec-butilo	200	966				11-66
208-760-7	540-88-5	Acetato de terc-butilo	200	966				11- 66
203-933-3	112-07-2	Acetato de 2-butoxietilo	20	133	50	333	vía dérmica, VLI	20/21
		Acetato del éter monobutílico del etilenglicol	véase Acetato de 2-butoxietilo					
		Acetato del éter monoetílico del etilenglicol	véase Acetato de 2-etoxietilo					
		Acetato del éter monometílico del etilenglicol	véase Acetato de 2-metoxietilo					
		Acetato de etilenglicol monopropileter	véase Acetato de 2-propoxietilo					
205-500-4	141-78-6	Acetato de etilo	400	1.460				11- 36-66-67
203-839-2	111-15-9	Acetato de 2-etoxietilo	5	27			vía dérmica,TR2,VLB	60-61-20/21/22
203-621-7	108-84-9	Acetato de sec-hexilo	50	300				
204-662-3	123-92-2	Acetato de isoamilo	50	270	100	540	VLI	10-66

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-745-1	110-19-0	Acetato de isobutilo	150	724				11- 66
203-561-1	108-21-4	Acetato de isopropilo	100	425	200	850		11-36-66-67
210-843-8	624-41-9	Acetato de 2-metilbutilo	50	270	100	540		10- 66
203-603-9	108-65-6	Acetato de 1-metil-2-metoxietilo	50	275	100	550	vía dérmica, VLI	10-36
201-185-2	79-20-9	Acetato de metilo	200	616	250	770		11- 36- 66-67
203-772-9	110-49-6	Acetato de 2-metoxietilo	5	24			vía dérmica, TR2, véase Apartado 9	60-61-20/21/22
274-724-2	70657-70-4	Acetato de 2-metoxipropilo	5	28	40	220	TR2,r	61-10-37
	620-11-1	Acetato de 3-pentilo	50	270	100	540	VLI	
203-686-1	109-60-4	Acetato de n-propilo	200	849	250	1.060		11-36- 66- 67
	20706-25-6	Acetato de 2-propoxietilo	20	120			vía dérmica	
203-545-4	108-05-4	Acetato de vinilo	10	36	15	54		11
200-816-9	74-86-2	Acetileno					b	5- 6- 12
202-708-7	98-86-2	Acetofenona	10	50				22-36
200-662-2	67-64-1	Acetona	500	1.210			VLB, VLI	11-36-66-67
200-835-2	75-05-8	Acetonitrilo	40	68			vía dérmica, VLI	11-20/21/22- 36
200-580-7	64-19-7	Ácido acético	10	25	15	37	véase Apartado 9	10- 35
200-064-1	50-78-2	Ácido acetilsalicílico (Aspirina)		5				
201-177-9	79-10-7	Ácido acrílico	2	6			vía dérmica	10-20/21/22- 35-50

Actualización

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
204-673-3	124-04-9	Ácido adípico		5				36
		Acido arsénico y sus sales, como As					véase Apartado 7	45-23/25-50/53
209-952-3	598-78-7	Ácido 2-cloropropiónico	0,1	0,45			vía dérmica	22-35
200-923-0	75-99-0	Ácido 2,2-dicloropropiónico	1	5,9			véase Apartado 9	22- 38- 41- 52/53
200-579-1	64-18-6	Ácido fórmico	5	9			VLI	35
	7782-79-8	Ácido hidrazoico, vapor			0,1	0,18		
231-633-2	7664-38-2	Ácido ortofosfórico		1		2	VLI	34
201-204-4	79-41-4	Ácido metacrílico	20	72				21/22-35
231-714-2	7697-37-2	Ácido nítrico			1	2,6	VLI	8- 35
205-634-3	144-62-7	Ácido oxálico		1			VLI	21/22
		Ácido pícrico	véase 2,4,6-Trinitrofenol					
201-176-3	79-09-4	Ácido propiónico	10	31	20	62	VLI	34
231-639-5	7664-93-9	Ácido sulfúrico		1		3	véase Apartado 9	35
202-830-0	100-21-0	Ácido tereftálico		10				
200-677-4	68-11-1	Ácido tioglicólico	1	3,8			vía dérmica	23/24/25- 34
200-927-2	76-03-9	Ácido tricloroacético	1	6,8				35-50/53
201-173-7	79-06-1	Acrilamida					véase Apartado 7	45-46-20/21-25-36/38-43-48/23/24/25-62
205-480-7	141-32-2	Acrilato de n-butilo	2	11	10	53	VLI, Sen	10-36/37/38- 43
		Acrilato de etilo	véase Éster etílico del ácido 2-propenoico					
213-663-8	999-61-1	Acrilato de 2-hidroxipropilo	0,5	2,7			vía dérmica, Sen	23/24/25-34-43

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EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
202-500-6	96-33-3	Acrilato de metilo	2	7,2			vía dérmica, Sen	11-20/21/22-36/37/38-43
		Acrilonitrilo	véase Cianuro de vinilo					
203-453-4	107-02-8	Acroleína	0,1	0,23	0,3	0,69	véase Apartado 9	11-24/25-26-34-50
	77536-66-4	Actinolita	véase Amianto					45-48/23
203-896-3	111-69-3	Adiponitrilo	2	9			vía dérmica	
232-350-7	8006-64-2	Aguarrás	100	567	150	850	Sen, véase Apartado 9	10-20/21/22-36/38-43-51/53-65
200-945-0	76-22-2	Alcanfor sintético	2	13	3	19		
203-470-7	107-18-6	Alcohol alílico	2	5	5	12	vía dérmica, VLI	10-23/24/25-36/37/38-50
200-751-6	71-36-3	Alcohol n-butílico			50	154	vía dérmica, véase Apartado 9	10-22-37/38-41-67
201-158-5	78-92-2	Alcohol sec-butílico	100	308				10-36/37/67
200-889-7	75-65-0	Alcohol terc-butílico	100	308	150	462	véase Apartado 9	11-20
200-578-6	64-17-5	Alcohol etílico	1.000	1.910				11
202-626-1	98-00-0	Alcohol furfurílico	5	20	15	61	vía dérmica, véase Apartado 9	20/21/22
204-633-5	123-51-3	Alcohol isoamílico	100	366	125	458		
201-148-0	78-83-1	Alcohol isobutílico	50	154				10-37/38-41-67
248-133-5	26952-21-6	Alcohol isooctílico	50	271			vía dérmica	
200-661-7	67-63-0	Alcohol isopropílico	400	998	500	1.250	véase Apartado 9	11-36-67
		Alcohol metilamílico	véase 4-Metil-2-pentanol					
200-659-6	67-56-1	Alcohol metílico	200	266			vía dérmica, VLB, VLI	11-23/24/25-39/23/24/25
		Alcohol propargílico	véase Prop-2-ino-1-ol					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-746-9	71-23-8	Alcohol n-propílico	200	500	400	1.000	vía dérmica	11-41-67
		Aldehido crotónico	véase 2-Butenal					
203-784-4	110-62-3	Aldehido n-valeriánico	50	179				
206-215-8	309-00-2	Aldrín		0,25			vía dérmica, ae, s	24/25-40-48/24/25-50/53
		Algodón en rama, polvo (fracción inhalable)		1,5			d	
232-679-6	9005-25-8	Almidón		10				
266-028-2	65996-93-2	Alquitrán de hulla, elevada temperatura. Brea					véase Apartado 7	45
231-072-3	7429-90-5	Aluminio :						
		Alquilos , como Al		2				
		Humos de soldadura, como Al		5				
		Metal en polvo		10				10-15 Al en polvo estabilizado
		Polvos de aluminotermia, como Al		5				
		Sales solubles, como Al		2			c	
	132207-33-1	Amianto					véase Apartado 7	45-48/23
205-483-3	141-43-5	2-Aminoetanol	1	2,5	3	7,5	vía dérmica, VLI	20/21/22-34
		Aminometano	véase Metilamina					
207-988-4	504-29-0	2-Aminopiridina	0,5	1,9				

Actualización

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-521-5	61-82-5	3-Amino-1,2,4-triazol		0,2			ae	48/22-63-51/53
		Amitrol	véase 3-Amino-1,2,4-triazol					
231-634-3	7664-41-7	Amoníaco	20	14	50	36	VLI	10-23-34-50
	12172-73-5	Amosita	véase Amianto					45-48/23
203-564-8	108-24-7	Anhídrido acético	5	21				10-20/22-34
201-607-5	85-44-9	Anhídrido ftálico	1	6			Sen	22-37/38-41-42/43
201-604-9	85-42-7	Anhídrido hexahidroftálico, todos los isómeros				0,005		41-42/43
203-571-6	108-31-6	Anhídrido maleico	0,25	1			Sen, véase Apartado 9	22-34-42/43
209-008-0	552-30-7	Anhídrido trimellítico		0,04		0,12	Sen	37-41-42/43
200-539-3	62-53-3	Anilina	2	7,7			vía dérmica, VLB	23/24/25-40-41-43-48/23/24/25-68-50
201-963-1	90-04-0	o-Anisidina					véase Apartado 7	45-23/24/25-68
203-254-2	104-94-9	p-Anisidina	0,1	0,5			vía dérmica, VLBm	26/27/28-33-50
231-146-5	7440-36-0	Antimonio Compuestos, como Sb, excepto hidruro de antimonio		0,5 0,5				20/22-51-53 con excepción del tetróxido,pentóxido,trisulfuro, pentasulfuro y los especialmente expresados en este documento
	77536-67-5	Antofilita	véase Amianto					45-48/23
		Antracita	véase Carbón					
201-706-3	86-88-4	ANTU		0,3				28-40
231-147-0	7440-37-1	Argón					b	
		Arsenamina	véase Hidruro de Arsénico					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-148-6	7440-38-2	Arsénico elemental		0,01			VLB, r, s	23/25-50/53
		Compuestos de Arsénico, como As, excepto aquellos que están expresamente indicados en esta tabla		0,01			r, s	23/25-50/53
232-490-9	8052-42-4	Asfalto (petróleo) humos, aerosoles solubles en benceno		0,5				
217-617-8	1912-24-9	Atrazina		5			Sen, ae,s	43-48/22-50/53
247-852-1	26628-22-8	Azida de sodio		0,1		0,3	vía dérmica, VLI	28-32-50/53
		Aziduro de sodio	véase Azida de sodio					
231-149-1	7440-39-3	Bario y compuestos solubles como Ba		0,5			c, VLI	
200-753-7	71-43-2	Benceno					véase Apartado 7	45-46-11-36/38-48/23/24/25-65
241-775-7	17804-35-2	Benomilo					véase Apartado 7	46-60-61-37/38-43-50/53
203-405-2	106-51-4	p-Benzoquinona	0,1	0,45				23/25-36/37/38-50
231-150-7	7440-41-7	Berilio					véase Apartado 7	49-25-26-36/37/38-43-48/23
		Compuestos de berilio, excepto los silicatos dobles de aluminio y berilio y excepto los indicados en esta tabla					véase Apartado 7	49-25-26-36/37/38-43-48/23-51/53
202-163-5	92-52-4	Bifenilo	0,2	1,3				36/37/38-50/53
231-548-0	7631-90-5	Bisulfito sódico		5				22-31
206-245-1	314-40-9	Bromacilo		10			s	
231-778-1	7726-95-6	Bromo	0,1	0,7			VLI	26-35-50
	74-97-5	Bromoclorometano	200	1.075				
209-800-6	593-60-2	Bromoetileno					véase Apartado 7	45-12
		Bromoformo	véase Tribromometano					
*203-445-0	106-94-5	1- Bromopropano	10					10-20

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-825-8	74-96-4	Bromuro de etilo	5	23			vía dérmica	11-20/22-40
233-113-0	10035-10-6	Bromuro de hidrógeno			2	7	VLI	35-37
200-813-2	74-83-9	Bromuro de metilo	1	4			vía dérmica, ae	23/25-36/37/38-68-48/20-50-59
		Bromuro de vinilo	véase Bromoetileno					
203-450-8	106-99-0	1,3-Butadieno					véase Apartado 7	45-46-12
203-448-7	106-97-8	Butano	véase Hidrocarburos alifáticos alcanos (C_1 - C_4) y sus mezclas, gases					12
		n-Butanol	véase Alcohol n-butílico					
		sec-Butanol	véase Alcohol sec-butílico					
		terc-Butanol	véase Alcohol terc-butílico					
		Butanona	véase Metiletilcetona					
		Butanotiol	véase n-Butilmercaptano					
204-647-1	123-73-9	2-Butenal			0,3	0,87	vía dérmica	11-24/25-26-37/38-41-48/22-50-68
		Butilamina (todos los isómeros)			5	15	vía dérmica	11-20/21/22-35
201-933-8	89-72-5	o-sec-Butilfenol	5	31			vía dérmica	
203-705-3	109-79-5	n-Butilmercaptano	0,5	1,9				
202-675-9	98-51-1	p-terc-Butiltolueno	1	6,2				
203-905-0	111-76-2	2-Butoxietanol	20	98	50	245	vía dérmica, VLI	20/21/22-36/38
203-961-6	112-34-5	2- (2-Butoxietoxi) etanol	10	67,5	15	101,2	VLI	36

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-152-8	7440-43-9	Cadmio (estabilizado)					véase Apartado 7	45-26-48/23/25-62-63-68-50/53
		Compuestos de cadmio, como Cd, excepto el sulfoseleniuro (xCdS y CdSe) , el sulfuro mixto de Cd y Zn (xCdS y ZnS),el sulfuro mixto de Cd y Hg (xCdS y HgS), y los especialmente indicados en este documento					VLB, r	20/21/22-50/53
		Fracción inhalable		0,01			d	
		Fracción respirable		0,002			d	
232-283-3	8001-35-2	Canfeno clorado		0,5		1	vía dérmica, ae, s	21-25-37/38-40-50/53
	1332-58-7	Caolín						
		Fracción respirable		2			d , e	
203-313-2	105-60-2	Caprolactama (vapor y polvo)		10		40	VLI	20/22-36/37/38
219-363-3	2425-06-1	Captafol					véase Apartado 7	45-43-50/53
205-087-0	133-06-2	Captán		5			Sen	23-40-41-43-50
200-555-0	63-25-2	Carbaril		5			vía dérmica	22-40-50
216-353-0	1563-66-2	Carbofurano		0,1			VLBa	26/28-50/53
		Carbón , polvo :						
		Antracita		2			véase Apartado 9	
		Bituminoso		2				
215-279-6	471-34-1	Carbonato de calcio		10			véase Apartado 9	
222-068-2	3333-67-3	Carbonato de níquel, como Ni		0,1			Sen, r	22-40-43-50/53
		Carborundo	véase Carburo de silicio					
206-991-8	409-21-2	Carburo de silicio		10			véase Apartado 9	
		Catecol	véase Pirocatecol					
232-674-9	9004-34-6	Celulosa		10				
266-043-4	65997-15-1	Cemento Portland		10				
232-315-6	8002-74-2	Cera de parafina, humos		2				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
		Cereales, polvo (avena, trigo, cebada)		4			e	
207-336-9	463-51-4	Ceteno	0,5	0,87	1,5	2,6		
205-861-8	156-62-7	Cianamida cálcica		0,5			Sen	22-37-41
206-992-3	420-04-2	Cianamida de hidrógeno	0,58	1			Sen, vía dérmica, VLI	21-25-36/38-43
		Cianhidrina de la acetona	véase 2-Ciano-2-propanol					
205-275-2	137-05-3	2-Cianoacrilato de metilo	0,2	0,92				36/37/38
207-306-5	460-19-5	Cianógeno	10	22				11-23-50/53
200-909-4	75-86-5	2-Ciano-2-propanol , como CN				5	vía dérmica	26/27/28-50/53
208-829-1	542-83-6	Cianuro de cadmio, como Cd Fracción inhalable Fracción respirable		 0,01 0,002			VLB, r d d	26/27/28-32-33-68-50/53
		Cianuro de hidrógeno y sales de cianhídrico						
209-740-0	592-01-8	Cianuro de calcio, como CN				5	vía dérmica	28-32-50/53
200-821-6	74-90-8	Cianuro de hidrógeno			4,7	5,3	vía dérmica	26/27/28-50/53
205-792-3	151-50-8	Cianuro de potasio, como CN				5	vía dérmica	
205-599-4	143-33-9	Cianuro de sodio, como CN				5	vía dérmica	
203-466-5	107-13-1	Cianuro de vinilo					véase Apartado 7	45-11-23/24/25-37/38-41-43-51/53
203-806-2	110-82-7	Ciclohexano	200	700			VLI	11-38-50/53-65-67
203-630-6	108-93-0	Ciclohexanol	50	208			vía dérmica	20/22-37/38
203-631-1	108-94-1	Ciclohexanona	10	41	20	82	vía dérmica, VLI, VLB	10-20

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-807-8	110-83-8	Ciclohexeno	300	1.020				
203-629-0	108-91-8	Ciclohexilamina	10	41				10-21/22-34
204-500-1	121-82-4	Ciclonita		0,5			vía dérmica	
208-835-4	542-92-7	Ciclopentadieno	75	206				
206-016-6	287-92-3	Ciclopentano	600	1.745				11-52/53
236-049-1	13121-70-5	Cihexaestaño		5				20/21/22-50/53
231-176-9	7440-67-7	Circonio y compuestos, como Zr		5		10		
221-008-2	2971-90-6	Clopidol		10				
200-349-0	57-74-9	Clordano		0,5			vía dérmica, ae, s	21/22-40-50/53
		Clorhidrina etilénica	véase 2-Cloroetanol					
231-959-5	7782-50-5	Cloro			0,5	1,5	VLI	23-36/37/38-50
203-472-8	107-20-0	Cloroacetaldehido			1	3,3		24/25-26-34-40-50
208-531-1	532-27-4	2-Cloroacetofenona	0,05	0,32				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
201-161-1	78-95-5	Cloroacetona			1	3,8		
203-628-5	108-90-7	Clorobenceno	5	23	15	70	VLB, VLI	10-20-51/53
220-278-9	2698-41-1	o-Clorobencilideno malononitrilo			0,05	0,39	vía dérmica	
204-818-0	126-99-8	2-Cloro-1,3-butadieno					véase Apartado 7	45-11-20/22-36/37/38-48/20
	53469-21-9	Clorodifenilo (42% de cloro)	0,1	1,1			vía dérmica, ae,r, véase Apartado 9	
	11097-69-1	Clorodifenilo (54% de cloro)	0,05	0,7			vía dérmica, ae,r, véase Apartado 9	
200-891-8	75-68-3	1-Cloro- 1,1- difluoroetano	1.000	4.200				
200-871-9	75-45-6	Clorodifluorometano	1.000	3.600			VLI	
203-439-8	106-89-8	1-Cloro-2,3-epoxipropano					véase Apartado 7	45-10-23/24/25-34-43
218-026-8	2039-87-4	o-Cloroestireno	50	288	75	432		
		Cloroetano	véase Cloruro de etilo					
203-459-7	107-07-3	2-Cloroetanol			1	3,3	vía dérmica	26/27/28
		Cloroetileno	véase Cloruro de vinilo					
		Cloroformo	véase Triclorometano					
202-809-6	100-00-5	p-Cloronitrobenceno	0,1	0,65			vía dérmica, VLBm	23/24/25-40-48/20/21/22-68-51/53
209-990-0	600-25-9	1-Cloro-1-nitropropano	2	10				20/22
200-938-2	76-15-3	Cloropentafluoroetano	1.000	6.420				
		Cloropicrina	véase Tricloronitrometano					
		β-Cloropreno	véase 2-Cloro-1,3-butadieno					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
202-424-3	95-49-8	o-Clorotolueno	50	264				20-51/53
200-894-4	75-72-9	Clorotrifluorometano	1.000	4.300				
220-864-4	2921-88-2	Clorpirifós		0,2			vía dérmica, VLBa, véase Apartado 9	25-50/53
203-457-6	107-05-1	Cloruro de alilo	1	3,2	2	6,4		11-20/21/22-36/37/38-40-48/20-68-50
235-186-4	12125-02-9	Cloruro amónico, humos		10		20		22-36
202-853-6	100-44-7	Cloruro de bencilo					véase Apartado 7	45-22-23-37/38-41-48/22
202-710-8	98-88-4	Cloruro de benzoilo			0,5	2,9		34
200-870-3	75-44-5	Cloruro de carbonilo	0,02	0,08	0,1	0,4	VLI	26-34
233-296-7	10108-64-2	Cloruro de cadmio					véase Apartado 7	45-46-60-61-25-26-48/23/25-50/53
208-052-8	506-77-4	Cloruro de cianógeno			0,3	0,77		
231-592-0	7646-85-7	Cloruro de cinc, humos		1		2		22-34-50/53
201-171-6	79-04-9	Cloruro de cloroacetilo	0,05	0,23	0,15	0,7	vía dérmica	14-23/24/25-35-48/23-50
239-056-8	14977-61-8	Cloruro de cromilo					véase Apartado 7	49-46-8-35-43-50/53
200-830-5	75-00-3	Cloruro de etilo	100	268			VLI	12-40-52/53
231-596-7	7647-01-0	Cloruro de hidrógeno	5	7,6	10	15	VLI	23-35
200-838-9	75-09-2	Cloruro de metileno	50	177			VLB	40
200-817-4	74-87-3	Cloruro de metilo	50	105	100	210	vía dérmica	12-40-48/20

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-748-8	7719-09-7	Cloruro de tionilo			1	4,9		14-20/22-29-35
200-864-0	75-35-4	Cloruro de vinilideno	5	20			r	12-20-40
200-831-0	75-01-4	Cloruro de vinilo					véase Apartado 7	45-12
231-158-0	7440-48-4	Cobalto elemental y compuestos inorgánicos, como Co		0,02			VLB, Sen	42/43-53
233-514-0	10210-68-1	Cobalto carbonilo, como Co		0,1				
	16842-03-8	Cobalto hidrocarbonilo, como Co		0,1				
231-159-6	7440-50-8	Cobre Humos Polvo y nieblas, como Cu		0,2 1				
		Colofonia	véase Resina núcleo de soldadura					
		Corindón	véase óxido de Aluminio					
215-293-2	1319-77-3	Cresoles	5	22			vía dérmica	24/25-34
	12001-29-5	Crisotilo	véase Amianto					
		Cristobalita	véase Sílice Cristalina					
	12001-28-4	Crocidolita	véase Amianto					
237-366-8	13765-19-0	Cromato cálcico					véase Apartado 7	45-22-50/53
		Cromatos de cinc, incluido el cromato de cinc y potasio, como Cr					véase Apartado 7	45-22-43-50/53
246-356-2	24613-89-6	Cromato de cromo (III)					véase Apartado 7	45-8-35-43-50/53
232-142-6	7789-06-2	Cromato de estroncio					véase Apartado 7	45-22-50/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-846-0	7758-97-6	Cromato de plomo, como Cr como Pb		 0,012 0,05			TR1 VLB	61-33-40-50/53-62
232-140-5	7789-00-6	Cromato de potasio					véase Apartado 7	49-46-36/37/38-43-50/53
231-889-5	7775-11-3	Cromato de sodio					véase Apartado 7	45-46-60-61-21-25-26-34-42/43-48/23-50/53
	1189-85-1	Cromato de terc-butilo, como CrO_3				0,1	vía dérmica	
	7440-47-3	Cromo metal, compuestos inorgánicos Cr(II) y Cr(III) insolubles, polvo total, como Cr		2			VLI	
	7440-47-3	Cromo (VI), compuestos inorgánicos, excepto el Cromato de bario y los específicamente citados en esta Tabla					véase Apartado 7	49-43-50/53
		Crotonaldehido	véase 2-Butenal					
206-083-1	299-86-5	Crufomato		5			VLBa	21/22-50/53
		Cuarzo	véase Sílice Cristalina					
202-704-5	98-82-8	Cumeno	20	100	50	250	vía dérmica, VLI	10-37-51/53-65
202-361-1	94-75-7	2,4-D		10			ae, Sen	22-37-41-43-52/53
		Dalapón	véase ácido 2,2-dicloropropiónico					
200-024-3	50-29-3	DDT		1			ae, s	25-40-48/25-50/53
241-711-8	17702-41-9	Decaborano	0,05	0,25	0,15	0,76	vía dérmica	

Actualización

EINECS	CAS	AGENTE QUÍMICO	LIMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
	8065-48-3	Demetón	0,01	0,11			vía dérmica, VLBa, véase Apartado 9	27/28-50
204-626-7	123-42-2	Diacetona alcohol	50	241				36
203-468-6	107-15-3	1,2-Diaminoetano	10	25			vía dérmica, Sen	10-21/22-34-42/43
206-373-8	333-41-5	Diazinón		0,1			vía dérmica , VLBa, ae, véase Apartado 9	22-50/53
206-382-7	334-88-3	Diazometano					véase Apartado 7	45
242-940-6	19287-45-7	Diborano	0,1	0,11				
203-444-5	106-93-4	1,2-Dibromoetano					véase Apartado 7	45-23/24/25-36/37/38-51/53
		Dibromuro de etileno	véase 1,2-Dibromoetano					
203-057-1	102-81-8	2-N-Dibutilaminoetanol	0,5	3,6			vía dérmica,VLBa	
	7572-29-4	Dicloroacetileno			0,1	0,39		2-40-48/20
202-425-9	95-50-1	o-Diclorobenceno	20	122	50	306	vía dérmica, VLI	22-36/37/38-50/53
203-400-5	106-46-7	p-Diclorobenceno	20	122	50	306	VLI	36-40-50/53
212-121-8	764-41-0	1,4-Diclorobutadieno					véase Apartado 7	45-24/25-26-34-50/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-893-9	75-71-8	Diclorodifluorometano	1.000	4.115	1.250	5.145	véase Apartado 9	
204-258-7	118-52-5	1,3-Dicloro-5,5-dimetilhidantoína		0,2		0,4		
200-863-5	75-34-3	1,1-Dicloroetano	100	412			vía dérmica, r, VLI	11-22-36/37-52/53
203-458-1	107-06-2	1,2-Dicloroetano					véase Apartado 7	45-11-22-36/37/38
208-750-2	540-59-0	1,2-Dicloroetileno	200	807	250	1.010	véase Apartado 9	11-20-52/53
200-869-8	75-43-4	Diclorofluorometano	10	43				
		Diclorometano	véase Cloruro de metileno					
209-854-0	594-72-9	1,1-Dicloro-1-nitroetano	2	12				23/24/25
201-152-2	78-87-5	1,2-Dicloropropano	75	352	110	517	véase Apartado 9	11-20/22
208-826-5	542-75-6	1,3-Dicloropropeno	1	4,6			vía dérmica, Sen	10-20/21-25-36/37/38-43-50/53
200-937-7	76-14-2	Diclorotetrafluoroetano	1.000	7.110	1.250	8.890	véase Apartado 9	
233-036-2	10025-67-9	Dicloruro de diazufre			1	5,6		14-20-25-29-35-50
		Dicloruro de etileno	véase 1,2-Dicloroetano					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-547-7	62-73-7	Diclorvós	0,1	0,91			vía dérmica, VLBa	24/25-26-43-50
232-143-1	7789-09-5	Dicromato de amonio					véase Apartado 7	45-46-60-61-2-8-21-25-26-34-42/43-48/23-50/53
231-906-6	7778-50-9	Dicromato de potasio					véase Apartado 7	45-46-60-61-8-21-25-26-34-42/43-48/23-50/53
234-190-3	10588-01-9	Dicromato de sodio					véase Apartado 7	45-46-60-61-8-21-25-26-34-42/43-50/53
	7789-12-0	Dicromato de sodio, dihidratado					véase Apartado 7	45-46-60-61-8-21-25-26-34-42/43-48/23-50/53
205-494-3	141-66-2	Dicrotofós		0,25			vía dérmica, VLBa, véase Apartado 9	24-28-50/53
220-433-0	2764-72-9	Dicuat Fracción inhalable Fracción respirable		 0,5 0,1			vía dérmica d d	50-53
200-484-5	60-57-1	Dieldrín		0,25			vía dérmica, ae, s	25-27-40-48/25-50/53
203-868-0	111-42-2	Dietanolamina	0,46	2			vía dérmica , f	22-38-41-48/22
203-716-3	109-89-7	Dietilamina	5	15	10	30	VLI, vía dérmica, f	11-20/21/22-35
202-845-2	100-37-8	2-Dietilaminoetanol	2	9,7			vía dérmica	10-20/21/22-34
		Dietilcetona	véase 3-Pentanona					
200-467-2	60-29-7	Dietiléter	100	308	200	616	VLI	12-19-22-66-67
		Dietilenglicol monobutiléter	véase 2-(2-butoxietoxi) etanol					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-865-4	111-40-0	Dietilentriamina	1	4,3			vía dérmica , Sen	21/22-34-43
204-539-4	122-39-4	Difenilamina		10				23/24/25-33-50/53
200-885-5	75-61-6	Difluorodibromometano	100	872				
231-996-7	7783-41-7	Difluoruro de oxígeno			0,05	0,11		
220-281-5	2699-79-8	Difluoruro de sulfurilo	5	21	10	42		23-48/20-50
224-729-0	4464-23-7	Diformiato de cadmio, como Cd Fracción inhalable Fracción respirable		 0,01 0,002			VLB, r d d	23/25-33-68-50/53
205-551-2	142-64-3	Dihidrocloruro de piperacina		5				
235-008-5	12054-48-7	Dihidróxido de níquel, como Ni		0,1			Sen, r	20/22-40-43-50/53
203-620-1	108-83-8	Diisobutilcetona	25	148				10-37
		Diisocianato de 4,4´-diciclohexilmetano	véase Metileno-bis-(4-ciclohexilisocianato)					
202-966-0	101-68-8	Diisocianato de 4,4´-difenilmetano	0,005	0,052			Sen	20-36/37/38-42/43
212-485-8	822-06-0	Diisocianato de 1,6-hexametileno	0,005	0,035			Sen	23-36/37/38-42/43
		Diisocianato de isoforona	véase 3-Isocianometil-3,5,5-trimetilciclohexilisocianato					
221-641-4	3173-72-6	Diisocianato de 1,5-naftileno	0,005	0,043			Sen	20-36/37/38-42-52/53
209-544-5 202-039-0	584-84-9 91-08-7	Diisocianato de 2,4-tolueno o Diisocianato de 2,6-tolueno	0,005	0,036	0,02	0,14	Sen	26-36/37/38-40-42/43-52/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-558-5	108-18-9	Diisopropilamina	5	21			vía dérmica	11-20/22-34
204-826-4	127-19-5	N,N-Dimetilacetamida	10	36	20	72	vía dérmica, VLB, TR2, VLI	61-20/21
204-697-4	124-40-3	Dimetilamina	2	3,8	5	9,4	VLI, f	12-20-37/38-41
215-091-4	1300-73-8	Dimetilaminobenceno, todos los isómeros	0,5	2,5			vía dérmica, VLBm	
204-493-5	121-69-7	N,N-Dimetilanilina	5	25	10	50	vía dérmica,VLBm	23/24/25-40-51/53
209-940-8	598-56-1	N,N-Dimetiletilamina	25	75	50	150		12-20/22-34
204-065-8	115-10-6	Dimetiléter	1.000	1.920			VLI	12
238-921-7	14857-34-2	Dimetiletoxisilano	0,5	2,2	1,5	6,5		
200-679-5	68-12-2	N,N-Dimetilformamida	10	30			vía dérmica , TR2, VLB	61-20/21-36
200-316-0	57-14-7	N,N-Dimetilhidracina					véase Apartado 7	45-11-23/25-34-51/53
		Dimetilpropano	véase Neopentano					
		Dimetoximetano	véase Metilal					
205-706-4	148-01-6	Dinitolmida		5				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
211-063-0	628-96-6	Dinitrato de etilenglicol	0,05	0,3			vía dérmica	2-26/27/28-33
229-180-0	6423-43-4	Dinitrato de propilenglicol	0,05	0,34			vía dérmica, VLBm	
208-431-8	528-29-0	1,2-Dinitrobenceno	0,15	1			vía dérmica,VLBm	26/27/28-33-50-53
202-776-8	99-65-0	1,3-Dinitrobenceno	0,15	1			vía dérmica,VLBm	26/27/28-33-50/53
202-833-7	100-25-4	1,4-Dinitrobenceno	0,15	1			vía dérmica,VLBm	26/27/28-33-50/53
208-601-1	534-52-1	Dinitro-o-cresol		0,2			vía dérmica, Sen	26/27/28-38-68-41-43-44-50/53
204-450-0	121-14-2	2,4-Dinitrotolueno					véase Apartado 7	45-23/24/25-48/22-51/53-62-68
210-106-0	606-20-2	2,6-Dinitrotolueno					véase Apartado 7	45-23/24/25-48/22-52/53-62-68
246-836-1	25321-14-6	Dinitrotolueno técnico					véase Apartado 7	45-23/24/25-48/22-51/53-62-68
204-661-8	123-91-1	1,4- Dioxano	20	74			vía dérmica	11-19-36/37-40-66

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
201-107-7	78-34-2	Dioxatión		0,2			vía dérmica,VLBa, véase Apartado 9	24-26/28-50/53
231-195-2	7446-09-5	Dióxido de azufre	2	5,3	5	13		23-34
204-696-9	124-38-9	Dióxido de carbono	5.000	9.150			VLI	
233-162-8	10049-04-4	Dióxido de cloro	0,1	0,28	0,3	0,84		6-8-26-34-50
234-823-3	12035-36-8	Dióxido de níquel					véase Apartado 7	49-43-53
233-272-6	10102-44-0	Dióxido de nitrógeno	3	5,7	5	9,6		26-34
236-675-5	13463-67-7	Dióxido de titanio		10				
		Dióxido de vinilciclohexeno	véase 1-Epoxietil-3,4-epoxiciclohexano					
		Dipropilcetona	véase 4-Heptanona					
202-607-8	97-77-8	Disulfiram		2			f, Sen	22-43-48/22-50/53
206-054-3	298-04-4	Disulfotón		0,1			VLBa,s, véase Apartado 9	27/28-50/53
218-550-7	2179-59-1	Disulfuro de alilpropilo	0,5	3				
200-843-6	75-15-0	Disulfuro de carbono	10	31			vía dérmica, VLB, ae, véase Apartado 9	11-36/38-48/23-62-63
234-829-6	12035-72-2	Disulfuro de triniquel					véase Apartado 7	49-43-51/53
206-354-4	330-54-1	Diurón		10			ae	22-40-48/22-50/53
215-325-5	1321-74-0	Divinilbenceno	10	54				
	112-55-0	Dodecil mercaptano	0,1					
204-079-4	115-29-7	Endosulfán		0,1			vía dérmica, ae,s	24/25-36-50/53
200-775-7	72-20-8	Endrín		0,1			vía dérmica, ae, s	24-28-50/53
237-553-4	13838-16-9	Enflurano	75	575				
		Enzimas	véase Subtilisinas					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
		Epiclorhidrina	véase 1-Cloro-2,3-epoxipropano					
		EPN	véase Feniltiofosfonato de O-etilo y O-(4-nitrofenilo)					
213-831-0	1024-57-3	Epóxido de heptacloro		0,05			vía dérmica	25-33-40-50/53
203-437-7	106-87-6	1-Epoxietil-3,4-epoxiciclohexano	0,1	0,58			vía dérmica	23/24/25-68
209-128-3	556-52-5	2,3-Epoxi-1-propanol					véase Apartado 7	45-60-21/22-23-36/37/38-68
	1302-74-5	Esmeril, polvo		10			e	
231-141-8	7440-31-5	Estaño Metal Compuestos orgánicos, como Sn Óxido y compuestos inorgánicos,como Sn		 2 0,1 2		 0,2	 vía dérmica	
		Estearatos (no incluye los estearatos de metales tóxicos)		10				
		Esteatita (Jabón de sastre) Fracción inhalable Fracción respirable		 6 3			 d d	
205-438-8	140-88-5	Éster etílico del ácido 2-propenoico	5	21	15	62	Sen	11-20/21/22-36/37/38-43
		Estibamina	véase Hidruro de Antimonio					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
202-851-5	100-42-5	Estireno (monómero)	20	86	40	172	VLB, ae	10-20-36/38
200-319-7	57-24-9	Estricnina		0,15				27/28-50/53
200-814-8	74-84-0	Etano	véase Hidrocarburos alifáticos alcanos (C_1 - C_4) y sus mezclas, gases					12
		Etanol	véase Alcohol etílico					
		Etanolamina	véase 2-Aminoetanol					
		Etanotiol	véase Etilmercaptano					
203-442-4	106-92-3	Éter alilglicidílico (EAG)	1	4,7			Sen	10-20/22-37/38-40-41-43-52/53-62-68
219-376-4	2426-08-6	Éter n-butilglicidílico (EBG)	25	133			Sen, véase Apartado 9	10-20/22-37-40-43-52/53-68
208-832-8	542-88-1	Éter bis(clorometílico)					véase Apartado 7	45-10-22-24-26
203-870-1	111-44-4	Éter dicloroetílico	5	30	10	60	vía dérmica	10-26/27/28-40
		Éter dietílico	véase Dietiléter					
218-802-6	2238-07-5	Éter diglicidílico (EDG)	0,1	0,54				
203-560-6	108-20-3	Éter diisopropílico	250	1.060	310	1.310		11-19-66-67
		Éter dimetílico	véase Dimetiléter					
211-309-7	637-92-3	Éter etil terc-butílico (ETBE)	5	21				
204-557-2	122-60-1	Éter fenilglicidílico (EFG)					véase Apartado 7	45-20-37/38-43-52/53-68

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
202-981-2	101-84-8	Éter fenílico, vapor	1	7,1	2	14,2		
223-672-9	4016-14-2	Éter isopropilglicidílico (EIG)	50	241	75	362		
216-653-1	1634-04-4	Éter metil-terc-butílico	40	147			véase Apartado 9	
252-104-2	34590-94-8	Éter metílico de dipropilenglicol	50	308			vía dérmica, VLI	
		Éter 1-metílico de propilenglicol	véase 1-Metoxipropan-2-ol					
		Éter 2-metílico de propilenglicol	véase 2-Metoxipropanol					
		Éter monobutílico del etilenglicol	véase 2-Butoxietanol					
		Éter monoetílico del etilenglicol	véase 2-Etoxietanol					
		Éter monometílico del etilenglicol	véase 2-Metoxietanol					
		Éter monopropílico del etilenglicol	véase 2-Propoxietanol					
		Etilamilcetona	véase 5-Metilheptan-3-ona					
200-834-7	75-04-7	Etilamina	5	9			VLI	12-36/37
202-849-4	100-41-4	Etilbenceno	100	441	200	884	vía dérmica,VLB, VLI	11-20
203-388-1	106-35-4	Etilbutilcetona	20	95			VLI	10-20-36
		Etilendiamina	véase 1,2-Diaminoetano					
203-473-3	107-21-1	Etilenglicol	20	52	40	104	vía dérmica, VLI	22
205-793-9	151-56-4	Etilenimina					véase Apartado 7	45-46-11-26/27/28-34-51/53
200-815-3	74-85-1	Etileno	200					12-67

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
	16219-75-3	Etilidennorborneno			5	25		
200-837-3	75-08-1	Etilmercaptano	0,5	1,3				11-20-50/53
202-885-0	100-74-3	N-Etilmorfolina	5	24			vía dérmica	
209-242-3	563-12-2	Etión		0,4			vía dérmica,VLBa, véase Apartado 9, s	21-25
203-804-1	110-80-5	2-Etoxietanol	5	18			vía dérmica TR2 , VLB	60-61-10-20/21/22
244-848-1	22224-92-6	Fenamifós		0,1			vía dérmica,VLBa, véase Apartado 9	24-28-50/53
202-430-6	95-54-5	o-Fenilendiamina		0,1			Sen	20/21-25-36-40-43-50/53
203-584-7	108-45-2	m-Fenilendiamina		0,1			Sen	23/24/25-36-40-43-50/53
203-404-7	106-50-3	p-Fenilendiamina		0,1			Sen	23/24/25-36-43-50/53
211-325-4	638-21-1	Fenilfosfina			0,05	0,23		
202-873-5	100-63-0	Fenilhidracina					véase Apartado 7	45-23/24/25-36/38-43-48/23/24/25-68- 50
203-635-3	108-98-5	Fenilmercaptano	0,1	0,46			vía dérmica	
		2-Fenilpropeno	véase α-Metilestireno					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
218-276-8	2104-64-5	Feniltiofosfonato de o-etilo y o-(4-nitrofenilo)		0,1			vía dérmica, VLBa	27/28-50/53
203-632-7	108-95-2	Fenol	2	8			vía dérmica,VLB, VLI	23/24/25-34-48/20/21/22-68
202-196-5	92-84-2	Fenotiazina		5			vía dérmica	
204-114-3	115-90-2	Fensulfotión		0,1			VLBa, véase Apartado 9	27/28-50/53
200-231-9	55-38-9	Fentión		0,2			vía dérmica,VLBa, s, véase Apartado 9	21/22-23-68-48/25-50/53
238-484-2	14484-64-1	Ferbam		10			s	36/37/38-50/53
	12604-58-9	Ferrovanadio, polvo		1		3		
		Fibras manufacturadas:						
		Fibras vítreas artificiales (fibras cerámicas refractarias, fibras para usos especiales, etc.)					véase Apartado 7	49-38
		Fibras vítreas artificiales (fibra de vidrio, lana mineral, etc.)	1 fibras/cm³				g, h	
		Filamento continuo y fibras vítreas artificiales excluídas de clasificación como carcinógenas	Trátese como partículas no clasificadas de otra forma				i	
		Otras fibras artificiales o sintéticas (p-Aramida, etc.)	1 fibras/cm³				h	

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-954-8	7782-41-4	Flúor	1	1,6	2	3,2	VLI, VLB	7-26-35
200-548-2	62-74-8	Fluoroacetato de sodio		0,05			vía dérmica	26/27/28-50
232-220-0	7790-79-6	Fluoruro de Cadmio					véase Apartado 7	45-46-60-61-25-26-48/23/25-50/53
206-534-2	353-50-4	Fluoruro de carbonilo	2	5,5	5	14		
231-634-8	7664-39-3	Fluoruro de hidrógeno	1,8	1,5	3	2,5	VLB, VLI	26/27/28-35
231-526-0	7616-94-6	Fluoruro de perclorilo	3	13	6	26		
		Fluoruros inorgánicos, como F, excepto el hexafluoruro de uranio		2,5			VLB, VLI	
213-408-0	944-22-9	Fonofós		0,1			vía dérmica, s, VLBa, véase Apartado 9	27/28-50/53
206-052-2	298-02-2	Forato		0,05		0,2	vía dérmica, s, VLBa, véase Apartado 9	27/28-52/53
200-001-8	50-00-0	Formaldehido			0,3	0,37	Sen, y	23/24/25-34-40-43
200-842-0	75-12-7	Formamida	10	19			vía dérmica, TR2	61
203-721-0	109-94-4	Formiato de etilo	100	308				11-20/22-36/37
203-481-7	107-31-3	Formiato de metilo	100	270	150	406	vía dérmica	12-20/22-36/37
		Fosfamina	véase Hidruro de Fósforo					
219-772-7	2528-36-1	Fosfato de dibutilfenilo	0,3	3,6			vía dérmica, VLB	
203-509-8	107-66-4	Fosfato de dibutilo	1	8,7	2	17		
204-800-2	126-73-8	Fosfato de tributilo	0,2	2,2			VLBa	22-38-40

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
204-112-2	115-86-6	Fosfato de trifenilo		3				
201-103-5	78-30-8	Fosfato de triortocresilo		0,1			vía dérmica, VLBa	39/23/24/25-51/53
204-471-5	121-45-9	Fosfito de trimetilo	2	10				
231-768-7	12185-10-3	Fósforo (P_4)	0,02	0,1				
		Fosgeno	véase Cloruro de carbonilo					
201-557-4	84-74-2	Ftalato de dibutilo		5			TR2, ae,r	61-50-62
204-211-0	117-81-7	Ftalato de di-2-etilhexilo		5			TR2, ae,r	60-61
201-550-6	84-66-2	Ftalato de dietilo		5				
205-011-6	131-11-3	Ftalato de dimetilo		5				
210-933-7	626-17-5	m-Ftalodinitrilo		5				
202-627-7	98-01-1	2-Furaldehido	2	8			vía dérmica, VLB	21-23/25-36/37-40
		Furfural	véase 2-Furaldehido					
289-220-8	86290-81-5	Gasolina					véase Apartado 7	45-65
		Gel de sílice	véase Sílice Amorfa					
200-289-5	56-81-5	Glicerina, nieblas		10				
		Glicidol	véase 2,3-Epoxi-1-propanol					
203-856-5	111-30-8	Glutaraldehido			0,05	0,2	Sen	23/25-34-42/43-50
231-955-3	7782-42-5	Grafito, polvo		2				
231-166-4	7440-58-6	Hafnio y compuestos, como Hf		0,5				
205-796-5	151-67-7	Halotano	50	410				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
		Harina, fracción inhalable		4			d, Sen	
		HDI	véase Diisocianato de 1,6-hexametileno					
231-168-5	7440-59-7	Helio					b	
200-962-3	76-44-8	Heptacloro		0,05			vía dérmica, ae, s	24/25-33-40-50/53
205-563-8	142-82-5	n-Heptano	500	2.085			VLI	11-38-50/53-65-67
		2-Heptanona	véase Metil-n-amilcetona					
		3-Heptanona	véase Etilbutilcetona					
204-608-9	123-19-3	4-Heptanona	50	239				10-20
204-273-9	118-74-1	Hexaclorobenceno					véase Apartado 7	45-48/25-50/53
201-765-5	87-68-3	Hexaclorobutadieno	0,02	0,2			vía dérmica	
201-029-3	77-47-4	Hexaclorociclopentadieno	0,01	0,11				22-24-26-34-50/53
200-666-4	67-72-1	Hexacloroetano	1	9,8			vía dérmica, r	
215-641-3	1335-87-1	Hexaclorona ftaleno		0,2			vía dérmica	
211-676-3	684-16-2	Hexafluoroacetona	0,1	0,69			vía dérmica	
241-084-0	17010-21-8	Hexafluorosilicato (2-) de cadmio, como Cd Fracción inhalable Fracción respirable		 0,01 0,002			VLB,r d d	23/25-33-68-50/53
219-854-2	2551-62-4	Hexafluoruro de azufre	1.000	6.075				
	7783-79-1	Hexafluoruro de selenio, como Se	0,05	0,16				
232-027-0	7783-80-4	Hexafluoruro de teluro	0,02	0,2				
		Hexametilendiamina	véase 1,6-Hexanodiamina					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-777-6	110-54-3	Hexano :						
		n-Hexano	20	72			VLB,VLI	11-38-48/20-51/53-62-65-67
		Otros isómeros	500	1.790	1.000	3.580		
204-679-6	124-09-4	1,6-Hexanodiamina	0,5	2,4				21/22-34-37
		2-Hexanona	véase Metil-n-butilcetona					
203-489-0	107-41-5	Hexilenglicol			25	123		36/38
		Hexona	véase Metilisobutilcetona					
206-114-9	302-01-2	Hidracina					véase Apartado 7	45-10-23/24/25-34-43-50/53
		Hidrocarburos alifáticos alcanos (C_1-C_4) y sus mezclas, gases	1000					12
215-605-7	1333-74-0	Hidrógeno					b	50/53
232-064-2	7784-40-9	Hidrogenoarsenato de plomo					véase Apartado 7	45-61-23/25-33-50/53-62
204-617-8	123-31-9	Hidroquinona		2			Sen	22-68-40-41-43-50
215-137-3	1305-62-0	Hidróxido de calcio		5				
244-344-1	21351-79-1	Hidróxido de cesio		2				
215-181-3	1310-58-3	Hidróxido de potasio				2		22-35
215-185-5	1310-73-2	Hidróxido de sodio				2		35
	7803-52-3	Hidruro de antimonio	0,1	0,5				
232-066-3	7784-42-1	Hidruro de arsénico	0,05	0,16			r	12-26-48/20-50/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
232-260-8	7803-51-2	Hidruro de fósforo	0,1	0,14	0,2	0,28	VLI	12-17-26-34-50
231-484-3	7580-67-8	Hidruro de litio		0,025				
		Hierro :						
203-039-3	102-54-5	Diciclopentadienilo		10				
236-670-8	13463-40-6	Pentacarbonilo, como Fe	0,1	0,8	0,2	1,6		
		Sales solubles, como Fe		1			c	
202-393-6	95-13-6	Indeno	10	48				
231-180-0	7440-74-6	Indio y compuestos, como In		0,1				
		Isobutanol	véase Alcohol isobutílico					
203-137-6	103-71-9	Isocianato de fenilo	0,01	0,05				
210-866-3	624-83-9	Isocianato de metilo	0,02	0,047			vía dérmica	12-24/25-26-37/38-41-42/43-63
223-861-6	4098-71-9	3-Isocianometil-3,5,5-trimetilciclo-hexilisocianato	0,005	0,046			Sen	23-36/37/38-42/43-51/53
247-897-7	26675-46-7	Isoflurano	50	383				
201-126-0	78-59-1	Isoforona			5	29		21/22-36/37-40
201-142-8	78-78-4	Isopentano	1.000	3.000			VLI	12-51/53-65-66-67
		Isopropanol	véase Alcohol isopropílico					

Actualización

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-860-9	75-31-0	Isopropilamina	5	12	10	24		12-36/37/38
212-196-7	768-52-5	N-Isopropilanilina	2	11			vía dérmica, VLBm	
203-685-6	109-59-1	2- Isopropoxietanol	5	22			vía dérmica	20/21-36
231-174-8	7440-65-5	Itrio, metal y compuestos, como Y		1				
205-316-4	138-22-7	Lactato de n-butilo	5	30				
	9006-04-6	Látex natural como proteínas totales		0,001			Sen, vía dérmica	
200-401-2	58-89-9	Lindano		0,5			vía dérmica, ae, s	20/21-25-48/22-64-50/53
		Maderas duras, polvo					véase Apartado 7, md	
		Maderas blandas, polvo		5			md	
208-915-9	546-93-0	Magnesita		10			e, véase Apartado 9	
204-497-7	121-75-5	Malatión		10			vía dérmica, ae, VLBa, véase Apartado 9	22-50/53
		Manganeso						
231-105-1	7439-96-5	Elemental y compuestos inorgánicos como Mn		0,2				
235-142-4	12079-65-1	Ciclopentadieniltricarbonilo, como Mn		0,1			vía dérmica	
235-166-5	12108-13-3	2-Metilciclopentadieniltricarbonilo,como Mn		0,2			vía dérmica	
		Mármol	véase Carbonato de calcio					
		MDI	véase Diisocianato de 4,4´-difenilmetano					
231-106-7	7439-97-6	Mercurio elemental y compuestos inorgánicos, como Hg		0,025			vía dérmica, VLB, s	23-33-50/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
		Mercurio : Alquil-compuestos, como Hg Aril-compuestos, como Hg		0,01 0,1		0,03	vía dérmica vía dérmica	
		Mesitileno	véase 1,3,5-Trimetilbenceno					
231-673-0	7681-57-4	Metabisulfito sódico		5				22-31-41
201-297-1	80-62-6	Metacrilato de metilo	50	208	100	416	Sen	11-37/38-43
200-812-7	74-82-8	Metano	véase Hidrocarburos alifáticos alcanos (C_1 - C_4) y sus mezclas, gases					12
		Metanol	véase Alcohol metílico					
		Metanotiol	véase Metilmercaptano					
200-828-4	74-99-7	Metilacetileno	1.000	1.665				
		Metilacrilonitrilo	véase 2-Metil-2-propeno-nitrilo					
203-714-2	109-87-5	Metilal	1.000	3.165				
203-767-1	110-43-0	Metil-n-amilcetona	50	237	100	474	vía dérmica, VLI	10-20/22
200-820-0	74-89-5	Metilamina	5	6,5	15	19		12-20-37/38-41
202-870-9	100-61-8	N-Metilanilina	0,5	2,2			vía dérmica, VLBm	23/24/25-33-50/53
201-676-1	86-50-0	Metil azinfós		0,2			vía dérmica, VLBa, Sen	24-26/28-43-50/53
		Metilbutano	véase Isopentano					
209-731-1	591-78-6	Metil-n-butilcetona	5	21			vía dérmica, VLB, véase Apartado 9	10-48/23-62-67
203-624-3	108-87-2	Metilciclohexano	400	1.630				11-38-51/53-65-67

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
247-152-6	25639-42-3	Metilciclohexanol, todos los isómeros	50	237				
209-513-6	583-60-8	2-Metilciclohexanona	50	233	75	349	vía dérmica	10-20
		Metilcloroformo	véase 1,1,1-Tricloroetano					
	8022-00-2	Metil demetón		0,5			vía dérmica, VLBa	
202-974-4	101-77-9	4,4´-Metilendianilina					véase Apartado 7	45-39/23/24/25-43-48/20/21/22-51/53-68
225-863-2	5124-30-1	Metileno-bis(4-ciclohexilisocianato)	0,005	0,055			Sen	23-36/37/38-42/43
202-918-9	101-14-4	4,4´-Metileno-bis (2-cloroanilina) (MBOCA)					véase Apartado 7	45-22-50/53
202-705-0	98-83-9	α-Metilestireno	50	246	100	492	VLI	10-36/37-51/53
201-159-0	78-93-3	Metiletilcetona	200	600	300	900	VLB, VLI	11-36-66-67
208-793-7	541-85-5	5-Metilheptan-3-ona	10	53	20	107	VLI	10-36/37
203-737-8	110-12-3	5-Metilhexan-2-ona	20	95			VLI	10-20
200-471-4	60-34-4	Metilhidracina	0,01	0,019			vía dérmica	
		Metilisoamilcetona	véase 5-Metilhexan-2-ona					
		Metilisobutilcetona	véase 4-Metilpentan-2-ona					
209-264-3	563-80-4	Metilisopropilcetona	200	715				11
200-822-1	74-93-1	Metilmercaptano	0,5	1				12-23-50/53
206-050-1	298-00-0	Metil paratión		0,2			vía dérmica, VLBa, ae, s	5-10-24-26/28-48/22-50/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-551-7	108-11-2	4-Metil-2-pentanol	25	106	40	170	vía dérmica	10-37
203-550-1	108-10-1	4-Metilpentan-2-ona	20	83	50	208	VLB, VLI	11-20-36/37-66
212-828-1	872-50-4	1-Metil-2-pirrolidona	25	103	75	309	vía dérmica	36/38
204-817-5	126-98-7	2-Metil-2-propeno-nitrilo	1	2,7			vía dérmica, Sen	11-23/24/25-43
203-528-1	107-87-9	Metilpropilcetona	200	715	250	894		
277-780-6	74222-97-2	Metilsulfometuron		5				
240-815-0	16752-77-5	Metomilo		2,5			VLBa	28-50/53
200-779-9	72-43-5	Metoxicloro		10			s	
203-713-7	109-86-4	2-Metoxietanol	5	16			vía dérmica, TR2, véase Apartado 9	60-61-10-20/21/22
203-906-6	111-77-3	2-(2-Metoxietoxi)etanol	10	50,1			vía dérmica, VLI	63
205-769-8	150-76-5	4-Metoxifenol		5			Sen	22-36-43
203-539-1	107-98-2	1-Metoxipropan-2-ol	100	375	150	568	vía dérmica, VLI	10
216-455-5	1589-47-5	2-Metoxipropanol	5	19			TR2	61-10-37/38-41
244-209-7	21087-64-9	Metribuzín		5				22-50/53
232-095-1	7786-34-7	Mevinfós	0,01	0,09	0,03	0,27	vía dérmica, VLBa,s, véase Apartado 9	27/28-50/53
	12001-26-2	Mica Fracción respirable		3			d , e	
231-107-2	7439-98-7	Molibdeno, como Mo Compuestos insolubles Compuestos solubles		10 5			véase Apartado 9 c c	
		Monocloruro de azufre	véase Dicloruro de diazufre					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
230-042-7	6923-22-4	Monocrotofós		0,25			vía dérmica, VLBa,s, véase Apartado 9	24-26/28-68-50/53
211-128-3	630-08-0	Monóxido de carbono	25	29			TR1 , VLB	61-12-23-48/23
215-215-7	1313-99-1	Monóxido de níquel					véase Apartado 7	49-43-53
233-271-0	10102-43-9	Monóxido de nitrógeno	25	31			VLBm, véase Apartado 9	
203-815-1	110-91-8	Morfolina	10	36	20	72	VLI	10-20/21/22-34
202-049-5	91-20-3	Naftaleno	10	53	15	80	vía dérmica	22-40-50/53
206-098-3	300-76-5	Naled		3			vía dérmica, VLBa, véase Apartado 9	21/22-36/38-50
215-609-9	1333-86-4	Negro de humo		3,5				
231-110-9	7440-01-9	Neón					b	
207-343-7	463-82-1	Neopentano	1.000	3.000			VLI	12-51/53-65-66-67
200-193-3	54-11-5	Nicotina		0,5			VLI, vía dérmica	25-27-51/53
		Níquel, compuestos inorgánicos excepto aquellos que están expresamente indicados en esta tabla						
		Compuestos insolubles, como Ni		0,2			c, Sen, r	
		Compuestos solubles, como Ni		0,1			c , Sen, r	
231-111-4	7440-02-0	Níquel metal		1			Sen, r	40-43
236-669-2	13463-39-3	Níquel carbonilo, como Ni	0,05	0,12			TR2, r	61-11-26-40-50/53
217-682-2	1929-82-4	Nitrapirina		10		20		22-51/53
210-985-0	627-13-4	Nitrato de n-propilo	25	109	40	175	VLBm	
202-810-1	100-01-6	p-Nitroanilina		3			vía dérmica, VLBm	23/24/25-33-52/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
202-716-0	98-95-3	Nitrobenceno	0,2	1			vía dérmica, VLB, VLI	23/24/25-40-48/23/24-51/53-62
201-188-9	79-24-3	Nitroetano	100	312				10-20/22
231-783-9	7727-37-9	Nitrógeno					b	
200-240-8	55-63-0	Nitroglicerina	0,05	0,5			vía dérmica	3-26/27/28-33-51/53
200-876-6	75-52-5	Nitrometano	20	51				5-10-22
203-544-9	108-03-2	1-Nitropropano	25	93				10-20/21/22
201-209-1	79-46-9	2-Nitropropano					véase Apartado 7	45-10-20/22
201-853-3	88-72-2	2-Nitrotolueno					véase Apartado 7	45-46-22-62-51/53
202-728-6	99-08-1	3-Nitrotolueno	5	29			vía dérmica, VLBm, véase Apartado 9	
202-808-0	99-99-0	4-Nitrotolueno	5	29			vía dérmica, VLBm, ae, véase Apartado 9	23/24/25-33-51/53
203-913-4	111-84-2	Nonano, todos los isómeros	200	1.065				
218-778-7	2234-13-1	Octacloronaftaleno		0,1		0,3	vía dérmica	
203-892-1	111-65-9	Octano, todos los isómeros	300	1.420				11-38-50/53-65-67

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
233-046-7	10025-87-3	Oxicloruro de fósforo	0,1	0,64				14-22-26-35-48/23
215-691-6	1344-28-1	Oxido de aluminio		10				
215-133-1	1304-56-9	Óxido de berilio					véase Apartado 7	49-25-26-36/37/38-43-48/23
215-125-8	1303-86-2	Oxido de boro		10				
215-146-2	1306-19-0	Óxido de cadmio					véase Apartado 7	45-26-48/23/25-62-63-68-50/53
215-138-9	1305-78-8	Óxido de calcio		2				
215-222-5	1314-13-2	Oxido de cinc Humos Polvo		 5 10		 10	véase Apartado 9	50/53 10-15 para el Polvo estabilizado
	31242-93-0	Oxido de difenilo o-clorado		0,5				
233-032-0	10024-97-2	Óxido de dinitrógeno	50	92				
200-849-9	75-21-8	Óxido de etileno					véase Apartado 7	45-46-12-23-36/37/38
215-168-2	1309-37-1	Óxido de hierro(III) (polvo y humos), como Fe		5				
215-171-9	1309-48-4	Oxido de Magnesio (humos y polvo)		10				
205-502-5	141-79-7	Oxido de mesitilo	15	61	25	102		10-20/21/22
200-879-2	75-56-9	Óxido de propileno					véase Apartado 7	45-46-12-20/21/22-36/37/38
215-238-2	1314-61-0	Oxido de tántalo, polvo, como Ta		5				
233-069-2	10028-15-6	Ozono : Trabajo pesado Trabajo moderado Trabajo ligero Trabajo pesado,moderado o ligero (≤ 2 horas)	 0,05 0,08 0,1 0,2	 0,1 0,16 0,2 0,4				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
225-141-7	4685-14-7	Paracuat : Fracción inhalable Fracción respirable		 0,5 0,1			 d d	24/25-36/37/38
217-615-7	1910-42-5	Paracuat dicloruro		0,1			vía dérmica	24/25-26-36/37/38-48/25-50/53
200-271-7	56-38-2	Paratión		0,1			vía dérmica,VLB, ae,s, véase Apartado 9	24-26/28-48/25-50/53
		Partículas (insolubles o poco solubles) no especificadas de otra forma: Fracción inhalable Fracción respirable		 10 3			c, o d , e d, e	
		Pelitre	véase Piretrinas					
243-194-4	19624-22-7	Pentaborano	0,005	0,013	0,015	0,039		
201-778-6	87-86-5	Pentaclorofenol		0,5			vía dérmica,VLB, r	24/25-26-36/37/38-40-50/53
215-320-8	1321-64-8	Pentacloronaftaleno		0,5			vía dérmica	21/22-36/38-50/53
201-435-0	82-68-8	Pentacloronitrobenceno		0,5			Sen	43-50/53
233-060-3	10026-13-8	Pentacloruro de fósforo		1			VLI	14-22-26-34-48/20

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
204-104-9	115-77-5	Pentaeritritol Fracción inhalable Fracción respirable		 10 4			 d d	
227-204-4	5714-22-7	Pentafluoruro de azufre			0,01	0,1		
232-157-8	7789-30-2	Pentafluoruro de bromo	0,1	0,73				
203-692-4	109-66-0	Pentano	1.000	3.000			VLI	12-51/53-65-66-67
		2-Pentanona	véase Metilpropilcetona					
202-490-3	96-22-0	3-Pentanona	200	716	300	1.075		11-37-66-67
215-242-4	1314-80-3	Pentasulfuro de fósforo		1			VLI	11-20/22-29-50
215-116-9	1303-28-2	Pentóxido de diarsénico					véase Apartado 7	45-23/25-50/53
215-236-1	1314-56-3	Pentóxido de fósforo		1			VLI	35
215-239-8	1314-62-1	Pentóxido de vanadio, como V_2O_5 , polvo respirable o humos		0,05			d , VLB	20/22-37-68-48/23-51/53-63
204-825-9	127-18-4	Percloroetileno	25	172	100	689	VLB, ae	40-51/53
209-840-4	594-42-3	Perclorometilmercaptano	0,1	0,77				
	19430-93-4	Perfluorobutiletileno	100					
	382-21-8	Perfluorisobutileno			0,01	0,083		
223-320-4	3825-26-1	Perfluoroctanoato amónico		0,01			vía dérmica	
	93763-70-3	Perlita		10			e, véase Apartado 9	
202-327-6	94-36-0	Peróxido de benzoilo		5			Sen	2-36-43

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
		Peróxido de 2-butanona	véase Peróxido de metiletilcetona					
231-765-0	7722-84-1	Peróxido de hidrógeno	1	1,4				5-8-20/22-35
215-661-2	1338-23-4	Peróxido de metiletilcetona			0,2	1,5		
		Persulfato de:						
231-786-5	7727-54-0	Amonio		0,1			Sen	8-22-36/37/38-42/43
231-781-8	7727-21-1	Potasio		0,1				
231-892-1	7775-27-1	Sodio		0,1				
217-636-1	1918-02-1	Picloram		10				
201-462-8	83-26-1	Pindona		0,1				25-48/25-50/53
203-808-3	110-85-0	Piperacina		0,1		0,3	VLI, Sen	34-42/43-52/53
232-319-8	8003-34-7	Piretrinas		1			VLI	20/21/22-50/53 incluyendo las cinerinas
203-809-9	110-86-1	Piridina	1	3			VLIp	11-20/21/22
204-427-5	120-80-9	Pirocatecol	5	23			vía dérmica	21/22-36/38
231-767-1	7722-88-5	Pirofosfato tetrasódico		5			véase Apartado 9	
231-131-3	7440-22-4	Plata: Metal Compuestos solubles como Ag		 0,1 0,01			 VLI c, VLI	
231-116-1	7440-06-4	Platino (metálico)		1				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-100-4	7439-92-1	Plomo inorgánico y sus derivados, como Pb		0,15			k, VLB, TR1	61-20/22-33-50-53-62
201-075-4	78-00-2	Plomo tetraetilo, como Pb		0,1			vía dérmica, TR1	61-26/27/28-33-50-53-62
200-897-0	75-74-1	Plomo tetrametilo, como Pb		0,15			vía dérmica, TR1	61-26/27/28-33-50-53-62
		Politetrafluoretileno, productos de su descomposición					I	
200-827-9	74-98-6	Propano	Véase Hidrocarburos alifáticos alcanos (C_1 - C_4) y sus mezclas, gases					12
200-878-7	75-55-8	Propilenimina					véase Apartado 7	45-11-26/27/28-41-51/53
204-062-1	115-07-1	Propileno	500					12
220-548-6	2807-30-9	2-Propoxietanol	20	86			vía dérmica	21-36
		Propino	véase Metilacetileno					
203-471-2	107-19-7	Prop-2-ino-1-ol	1	2,3			vía dérmica	10-23/24/25-34-51/53
200-340-1	57-57-8	β-Propiolactona					véase Apartado 7	45-26-36/38
204-043-8	114-26-1	Propoxur		0,5			VLBa,sr	25-50/53
		Protóxido de nitrógeno	véase Óxido de dinitrógeno					
		Quinona	véase p-Benzoquinona					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
232-475-7	8050-09-7	Resina núcleo de soldadura (colofonia)					m, Sen	43
203-585-2	108-46-3	Resorcinol	10	46			VLI,ae	22-36/38-50
231-125-0	7440-16-6	Rodio Metal y compuestos insolubles, como Rh Compuestos solubles, como Rh		 1 0,01			 c c	
206-082-6	299-84-3	Ronnel		10			VLBa, véase Apartado 9	21/22-50/53
201-501-9	83-79-4	Rotenona comercial		5				25-36/37/38-50/53
200-334-9	57-50-1	Sacarosa		10				
231-957-4	7782-49-2	Selenio, compuestos de, como Se (excepto el Seleniuro de hidrógeno)		0,1			véase Apartado 9	23/25-33-53
231-978-9	7783-07-5	Seleniuro de hidrógeno	0,02	0,07	0,05	0,17	VLI	
205-259-5	136-78-7	Sesona		10				
215-710-8	1344-95-2	Silicato cálcico (sintético)		10			e	
201-083-8	78-10-4	Silicato de etilo	10	87	30	260	véase Apartado 9	10-20-36/37
211-656-4	681-84-5	Silicato de metilo	1	6,3				
		Sílice Amorfa :						
	112926-00-8	Gel de sílice		10			véase Apartado 9	
262-373-8	60676-86-0	Sílice fundida Fracción respirable		 0,1			véase Apartado 9 d	

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
273-761-1	69012-64-2	Sílice, humos Fracción respirable		2			véase Apartado 9 d	
	112926-00-8	Sílice precipitada		10			véase Apartado 9	
	61790-53-2	Tierra de diatomeas (sin calcinar) Fracción inhalable		10			véase Apartado 9 d , e	
		Fracción respirable		3			d , e	
		Sílice Cristalina:					n	
238-455-4	14464-46-1	Cristobalita Fracción respirable		0,05			véase Apartado 9,d	
238-878-4	14808-60-7	Cuarzo Fracción respirable		0,1			véase Apartado 9, d	
239-487-1	15468-32-3	Tridimita Fracción respirable		0,05			véase Apartado 9 d	
	1317-95-9	Trípoli Fracción respirable		0,1			véase Apartado 9 d	
231-130-8	7440-21-3	Silicio Fracción inhalable Fracción respirable		10 4			véase Apartado 9 d d	
		Soldadura, humos		5			ñ	
232-752-2	9014-01-1	Subtilisinas (enzimas proteolíticas como enzima pura cristalina al 100%)				0,00006	Sen	37/38-41-42
231-871-7	7773-06-0	Sulfamato amónico		10				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-784-4	7727-43-7	Sulfato de bario		10			e	
233-331-6	10124-36-4	Sulfato de Cadmio					véase Apartado 7	45-46-60-61-25-26-48/23/25-50/53
231-900-3	7778-18-9	Sulfato de calcio		10			e	
232-104-9	7786-81-4	Sulfato de níquel, como Ni		0,1			Sen, r	22-40-42/43-50/53
201-058-1	77-78-1	Sulfato de dimetilo					véase Apartado 7	45-25-26-34-43-68
222-995-2	3689-24-5	Sulfotep		0,1			vía dérmica, VLBa, VLI,s	27/28-50/53
	75-18-3	Sulfuro de dimetilo	10					
215-147-8	1306-23-6	Sulfuro de Cadmio					véase Apartado 7	45-22-48/23/25-62-63-68-53
231-977-3	7783-06-4	Sulfuro de hidrógeno	10	14	15	21		12-26-50
240-841-2	16812-54-7	Sulfuro de níquel					véase Apartado 7	49-43-50/53
252-545-0	35400-43-2	Sulprofós		1			VLBa, s	
202-273-3	93-76-5	2,4,5-T		10			vía dérmica	22-36/37/38-50/53
238-877-9	14807-96-6	Talco (sin fibras de amianto) Fracción respirable		2			d , e	
238-877-9	14807-96-6	Talco (con fibras de amianto)	véase Amianto				p	
231-138-1	7440-28-0	Talio elemental y compuestos solubles, como Tl		0,1			vía dérmica, c	26/28-33-53
231-135-5	7440-25-7	Tántalo Metal, polvo		5				
		TDI	véase Diisocianato de 2,4- tolueno					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
236-813-4	13494-80-9	Teluro		0,1				
215-135-2	1304-82-1	Telururo de bismuto						
		Sin dopar		10				
		Dopado con selenio, como Bi_2Te_3		5				
222-191-1	3383-96-8	Temefós		10			VLBa, s, véase Apartado 9	
203-495-3	107-49-3	TEPP	0,004	0,05			vía dérmica, VLBa	27/28-50
247-477-3	26140-60-3	Terfenilos			0,52	5		
262-967-7	61788-32-7	Terfenilos hidrogenados	2	20	5	50		
215-540-4		Tetraborato, sales sódicas						
	1330-43-4	Anhidro		1			véase Apartado 9	
	1303-96-4	Decahidrato		5				
	11130-12-4	Pentahidrato		1				
201-191-5	79-27-6	1,1,2,2-Tetrabromoetano	1	14			véase Apartado 9	26-36-52/53
		Tetrabromuro de acetileno	véase 1,1,2,2-Tetrabromoetano					
201-197-8	79-34-5	1,1,2,2-Tetracloroetano	1	7			vía dérmica, r	26/27-51/53
215-642-9	1335-88-2	Tetracloronaftaleno		2				
200-262-8	56-23-5	Tetracloruro de carbono	5	32	10	64	vía dérmica, r	23/24/25-40-48/23-52/53-59
204-126-9	116-14-3	Tetrafluoroetileno	2	8,3				
232-013-4	7783-60-0	Tetrafluoruro de azufre			0,1	0,45		

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
203-726-8	109-99-9	Tetrahidrofurano	50	150	100	300	vía dérmica, VLI, VLB	11-19-36/37
231-961-6	7782-65-2	Tetrahidruro de germanio	0,2	0,64				
	3333-52-6	Tetrametilsuccinonitrilo	0,5	2,8			vía dérmica	
208-094-7	509-14-8	Tetranitrometano	0,005	0,04				
207-531-9	479-45-8	Tetrilo		1,5				2-23/24/25-33
244-058-7	20816-12-0	Tetróxido de osmio, como Os	0,0002	0,002	0,0006	0,006		26/27/28-34
		Tierra de diatomeas (sin calcinar)	véase Sílice Amorfa					
202-525-2	96-69-5	4,4´-Tiobis (6-tercbutil-m-cresol)		10				
205-286-2	137-26-8	Tiram		1			Sen, ae	20/22-36/38-43-48/22-50/53
203-625-9	108-88-3	Tolueno	50	192	100	384	vía dérmica, VLB, VLI,r	11-38-48/20-63-65-67
202-429-0	95-53-4	o-Toluidina					véase Apartado 7	45-23/25-36-50
203-583-1	108-44-1	m-Toluidina	2	8,9			vía dérmica,VLBm	23/24/25-33-50
203-403-1	106-49-0	p-Toluidina	2	8,9			vía dérmica,VLBm	23/24/25-36-40-43-50
		Toxafeno	véase Canfeno clorado					
	77536-68-6	Tremolita	véase Amianto					45-48/23
200-854-6	75-25-2	Tribromometano	0,5	5,3			vía dérmica	23-36/38-51/53
233-657-9	10294-33-4	Tribromuro de boro			1	10		14-26/28-35
204-428-0	120-82-1	1,2,4-Triclorobenceno	2	15	5	38	vía dérmica, VLI,r	22-38-50/53

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-756-3	71-55-6	1,1,1-Tricloroetano	100	555	200	1.110	VLB, r, VLI	20-59
201-166-9	79-00-5	1,1,2-Tricloroetano	10	56			vía dérmica, r	20/21/22-40-66
201-167-4	79-01-6	Tricloroetileno					véase Apartado 7	45-36/38-52/53-67-68
200-892-3	75-69-4	Triclorofluorometano			1.000	5.720		
200-663-8	67-66-3	Triclorometano	2	10			r, vía dérmica, VLI	22-38-40-48/20/22
215-321-3	1321-65-9	Tricloronaftaleno		5			vía dérmica	
200-930-9	76-06-2	Tricloronitrometano	0,1	0,7				22-26-36/37/38
200-936-1	76-13-1	1,1,2-Tricloro-1,2,2-trifluoretano	1.000	7.795	1.250	9.745		
231-749-3	7719-12-2	Tricloruro de fósforo	0,2	1,1	0,5	2,8		14-26/28-35-48/20
		Tridimita	véase Sílice Cristalina					
203-049-8	102-71-6	Trietanolamina		5				
204-469-4	121-44-8	Trietilamina	2	8,4	3	12,6	vía dérmica, f, VLI	11-20/21/22-35
210-035-5	603-34-9	Trifenilamina		5				

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
200-887-6	75-63-8	Trifluorbromometano	1.000	6.195				
231-569-5	7637-07-2	Trifluoruro de boro			1	3		14-26-35
232-230-4	7790-91-2	Trifluoruro de cloro			0,1	0,38		
232-007-1	7783-54-2	Trifluoruro de nitrógeno	10	30			VLBm	
200-875-0	75-50-3	Trimetilamina	5	12	15	37		12-20-37/38-41
208-394-8	526-73-8	1,2,3-Trimetilbenceno	20	100			VLI	
202-436-9	95-63-6	1,2,4-Trimetilbenceno	20	100			VLI	10-20-36/37/38-51/53
203-604-4	108-67-8	1,3,5-Trimetilbenceno	20	100			VLI	10-37-51/53
201-865-9	88-89-1	2,4,6-Trinitrofenol		0,1				2-4-23/24/25
204-289-6	118-96-7	2,4,6-Trinitrotolueno		0,1			vía dérmica, VLBm	2-23/24/25-33-51/53
		Trinitruro de sodio	véase Azida de sodio					
		Triortocresilfosfato	véase Fosfato de triortocresilo					
215-481-4	1327-53-3	Trióxido de diarsénico					véase Apartado 7	45-28-34-50/53
215-607-8	1333-82-0	Trioxido de cromo					véase Apartado 7	45-46-9-24/25-26-35-42/43-48/23-62-50/53
215-217-8	1314-06-3	Trióxido de diníquel					véase Apartado 7	49-43-53
		Trípoli	véase Sílice Cristalina					

EINECS	CAS	AGENTE QUÍMICO	LÍMITES ADOPTADOS VLA-ED ppm	VLA-ED mg/m³	VLA-EC ppm	VLA-EC mg/m³	NOTAS	FRASES R
231-143-9	7440-33-7	Tungsteno, como W Compuestos insolubles Compuestos solubles		 5 1		 10 3	 c c	
231-170-6	7440-61-1	Uranio (natural) , compuestos solubles e insolubles, como U		0,2		0,6	c	26/28-33-53
202-848-9	100-40-3	4-Vinilciclohexeno	0,1	0,45				
246-562-2	25013-15-4	Viniltolueno	50	246	100	492		
201-377-6	81-81-2	Warfarina		0,1			TR1	61-48/25-52/53
265-185-4	64742-82-1	White spirit (nafta de petróleo)	50	290	100	580	j, vía dérmica	65
		Wolframio	véase Tungsteno					
202-422-2	95-47-6	o-Xileno	50	221	100	442	vía dérmica, VLB, VLI	10-20/21-38
203-576-3	108-38-3	m-Xileno	50	221	100	442	vía dérmica,VLB, VLI	10-20/21-38
203-396-5	106-42-3	p-Xileno	50	221	100	442	vía dérmica,VLB,VLI	10-20/21-38
215-535-7	1330-20-7	Xilenos, mezcla isómeros	50	221	100	442	vía dérmica, VLB, VLI	10-20/21-38
		Xilidina ,todos los isómeros	véase Dimetilaminobenceno					
231-442-4	7553-56-2	Yodo			0,1	1		20/21-50
200-874-5	75-47-8	Yodoformo	0,6	9,8				
232-223-6	7790-80-9	Yoduro de cadmio, como Cd Fracción inhalable Fracción respirable		 0,01 0,002			VLB,r d d	23/25-33-68-50/53
200-819-5	74-88-4	Yoduro de metilo	2	12			vía dérmica	21-23/25-37/38-40

➢ United Kingdom[40]

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Acetaldehyde	75-07-0	20	37	50	92	
Acetic anhydride	108-24-7	0.5	2.5	2	10	
Acetone	67-64-1	500	1210	1500	3620	
Acetonitrile	75-05-8	40	68	60	102	
o-Acetylsalicylic acid	50-78-2	-	5	-	-	
Acrylaldehyde (Acrolein)	107-02-8	0.1	0.23	0.3	0.7	
Acrylamide	79-06-1	-	0.3	-	-	Carc, Sk
Acrylonitrile	107-13-1	2	4.4	-	-	Carc, Sk
Allyl alcohol	107-18-6	2	4.8	4	9.7	Sk
Aluminium alkyl compounds		-	2	-	-	
Aluminium metal inhalable dust respirable dust	7429-90-5	 - -	 10 4	 - -	 - -	

[40] Health and Safety Executive , **2011**, EH40/2005 Workplace exposure limits

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Aluminium oxides inhalable dust respirable dust	1344-28-1	 - -	 10 4	 - -	 - -	
Aluminium salts, soluble		-	2	-	-	
2-Aminoethanol	141-43-5	1	2.5	3	7.6	Sk
Ammonia, anhydrous	7664-41-7	25	18	35	25	
Ammonium chloride, fume	12125-02-9	-	10	-	20	
Ammonium sulphamidate	7773-06-0	-	10	-	20	
Aniline	62-53-3	1	4	-	-	Sk
Antimony and compounds except stibine (as Sb)		-	0.5	-	-	
ρ-Aramid respirable fibres	26125-61-1	0.5 fibres/ ml		-	-	
Arsenic and arsenic compounds except arsine (as As)		-	0.1	-	-	Carc
Arsine	7784-42-1	0.05	0.16	-	-	
Asphalt, petroleum fumes	8052-42-4	-	5	-	10	
Azodicarbonamide	123-77-3	-	1.0	-	3.0	Sen
Barium compounds, soluble (as Ba)		-	0.5	-	-	
Barium sulphate inhalable dust respirable dust	7727-43-7	 - -	 10 4	 - -	 - -	
Benzene	71-43-2	1	3.25	-	-	Carc, Sk
Benzyl butyl phthalate	85-68-7	-	5	-	-	
Benzyl chloride	100-44-7	0.5	2.6	1.5	7.9	Carc
Beryllium and beryllium compounds (as Be)		-	0.002	-	-	Carc
Bis(2-ethylhexyl) phthalate	117-81-7	-	5	-	10	
Bis(chloromethyl) ether	542-88-1	0.001	0.005	-	-	Carc
Bisphenol A inhalable dust	80-05-7	-	10	-	-	
Bornan-2-one	77-22-2	2	13	3	19	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Boron tribromide	10294-33-4	-	-	1	10	
Bromacil (ISO)	314-40-9	1	11	2	22	
Bromine	7726-95-6	0.1	0.66	0.2	1.3	
Bromomethane	74-83-9	5	20	15	59	Sk
Butane	106-97-8	600	1450	750	1810	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)
Buta-1,3-diene	106-99-0	10	22	-	-	Carc
Butan-1-ol	71-36-3	-	-	50	154	Sk
Butan-2-ol	78-92-2	100	308	150	462	
Butan-2-one (methyl ethyl ketone)	78-93-3	200	600	300	899	Sk, BMGV
2-Butoxyethanol	111-76-2	25	123	50	246	Sk, BMGV
2-(2-Butoxyethoxy) ethanol	112-34-5	10	67.5	15	101.2	
2-Butoxyethyl acetate	112-07-2	20	133	50	332	Sk
n-Butyl acrylate	141-32-2	1	5	5	26	
n-Butyl chloroformate	592-34-7	1	5.7	-	-	
sec-Butyl acetate	105-46-4	200	966	250	1210	
tert-Butyl acetate	540-88-5	200	966	250	1210	
Butyl acetate	123-86-4	150	724	200	966	
Butyl lactate	138-22-7	5	30	-	-	
2-*sec*-Butylphenol	89-72-5	5	31	-	-	Sk
Cadmium and cadmium compounds except cadmium oxide fume, cadmium sulphide and cadmium sulphide pigments (as Cd)		-	0.025	-	-	Carc (cadmium metal, cadmium chloride, fluoride and sulphate)
Cadmium oxide fume (as Cd)	1306-19-0	-	0.025	-	0.05	Carc

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Cadmium sulphide and cadmium sulphide pigments (respirable dust (as Cd))		-	0.03	-	-	Carc (cadmium sulphide)
Caesium hydroxide	21351-79-1	-	2	-	-	
Calcium carbonate inhalable dust respirable	1317-65-3	 - -	 10 4	 - -	 - -	
Calcium cyanamide	156-62-7	-	0.5	-	1	
Calcium hydroxide	1305-62-0	-	5	-	-	
Calcium oxide	1305-78-8	-	2	-	-	
Calcium silicate inhalable dust respirable	1344-95-2	 - -	 10 4	 - -	 - -	
Captan (ISO)	133-06-2	-	5	-	15	
Carbon black	1333-86-4	-	3.5	-	7	
Carbon dioxide	124-38-9	5000	9150	15000	27400	
Carbon disulphide	75-15-0	5	15	-	-	Sk
Carbon monoxide	630-08-0	30	35	200	232	BMGV
Carbon tetrachloride	56-23-5	2	13	-	-	Sk
Cellulose inhalable dust respirable	9004-34-6	 - -	 10 4	 - -	 20 -	
Chlorine	7782-50-5	-	-	0.5	1.5	
Chlorine dioxide	10049-04-4	0.1	0.28	0.3	0.84	
Chloroacetaldehyde	107-20-0	-	-	1	3.3	
2-Chloroacetophenone	532-27-4	0.05	0.32	-	-	
Chlorobenzene	108-90-7	1	4.7	3	14	Sk
Chlorodifluoromethane	75-45-6	1000	3590	-	-	
Chloroethane	75-00-3	50	134	-	-	
2-Chloroethanol	107-07-3	-	-	1	3.4	Sk
1-Chloro-2,3-epoxypropane (Epichlorohydrin)	106-89-8	0.5	1.9	1.5	5.8	Carc

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Chloroform	67-66-3	2	9.9	-	-	Sk
Chloromethane	74-87-3	50	105	100	210	
1-Chloro-4-nitrobenzene	100-00-5	-	1	-	2	Sk
Chlorosulphonic acid	7790-94-5	-	1	-	-	
Chlorpyrifos (ISO)	2921-88-2	-	0.2	-	0.6	Sk
Chromium	7440-47-3	-	0.5	-	-	
Chromium (II) compounds (as Cr)		-	0.5	-	-	
Chromium (III) compounds (as Cr)		-	0.5	-	-	
Chromium (VI) compounds (as Cr)		-	0.05	-	-	Carc, sen, BMGV
Cobalt and Cobalt compounds (as Co)		-	0.1	-	-	Carc (cobalt dichloride and sulphate), Sen
Copper fume (as Cu)	7440-50-8	-	0.2	-	-	
Copper and compounds: dust and mists (as Cu)		-	1	-	2	
Cotton dust	(see paras 19–21)	-	2.5	-	-	
Cryofluorane (INN)	76-14-2	1000	7110	1250	8890	
Cumene	98-82-8	25	125	50	250	Sk
Cyanamide	420-04-2	0.58	1	-	-	Sk
Cyanides, except HCN, cyanogen and cyanogen chloride (as Cn)		-	5	-	-	Sk
Cyanogen chloride	506-77-4	-	-	0.3	0.77	
Cyclohexane	110-82-7	100	350	300	1050	
Cyclohexanol	108-93-0	50	208	-	-	
Cyclohexanone	108-94-1	10	41	20	82	Sk, BMGV
Cyclohexylamine	108-91-8	10	41	-	-	
2,4-D (ISO)	94-75-7	-	10	-	20	
Dialkyl 79 phthalate	83968-18-7	-	5	-	-	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$	
Diallyl phthalate	131-17-9	-	5	-	-	
Diatomaceous earth, natural, respirable dust	61790-53-2	-	1.2	-	-	
Dibenzoyl peroxide	94-36-0	-	5	-	-	
Dibismuth tritelluride	1304-82-1	-	10	-	20	
Diboron trioxide	1303-86-2	-	10	-	20	
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.5	3.9	-	-	Carc, Sk
Dibutyl hydrogen phosphate	107-66-4	1	8.7	2	17	
Dibutyl phthalate	84-74-2	-	5	-	10	
Dichloroacetylene	7572-29-4	-	-	0.1	0.39	
1,2-Dichlorobenzene (*ortho*-dichlorobenzene)	95-50-1	25	153	50	306	Sk
1,4 Dichlorobenzene (*para*-dichlorobenzene)	106-46-7	25	153	50	306	
1,3-Dichloro-5,5-dimethyl-hydantoin	118-52-5	-	0.2	-	0.4	
1,1-Dichloroethane	75-34-3	100	-	-	-	Sk
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	5	21	-	-	Carc, Sk
1,2-Dichloroethylene, cis:trans isomers 60:40	540-59-0	200	806	250	1010	
Dichlorofluoromethane	75-43-4	10	43	-	-	
Dichloromethane	75-09-2	100	350	300	1060	BMGV, Sk
2,2'-Dichloro-4,4'-methylene dianiline (MbOCA)	101-14-4	-	0.005	-	-	Carc, Sk, BMGV
Dicyclohexyl phthalate	84-61-7	-	5	-	-	
Dicyclopentadiene	77-73-6	5	27	-	-	
Diethylamine	109-89-7	5	15	10	30	
Diethyl ether	60-29-7	100	310	200	620	
Diethyl phthalate	84-66-2	-	5	-	10	
Diethyl sulphate	64-67-5	0.05	0.32	-	-	Carc, Sk

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Dihydrogen selenide (as Se)	7783-07-5	0.02	0.07	0.05	0.17	
Diisobutyl phthalate	84-69-5	-	5	-	-	
Diisodecyl phthalate	26761-40-0	-	5	-	-	
Diisononyl phthalate	28553-12-0	-	5	-	-	
Diisooctyl phthalate	27554-26-3	-	5	-	-	
Diisopropylamine	108-18-9	5	21	-	-	
Diisopropyl ether	108-20-3	250	1060	310	1310	
N,N-Dimethylacetamide	127-19-5	10	36	20	72	Sk, BMGV
N,N-Dimethylaniline	121-69-7	5	25	10	50	Sk
N,N-Dimethylethylamine	598-56-1	10	30	15	46	
Dimethoxymethane	109-87-5	1000	3160	1250	3950	
Dimethylamine	124-40-3	2	3.8	6	11	
2-Dimethylaminoethanol	108-01-0	2	7.4	6	22	
Dimethyl ether	115-10-6	400	766	500	958	
N,N-Dimethylformamide	68-12-2	5	15	10	30	Sk
2,6-Dimethylheptan-4-one	108-83-8	25	148	-	-	
Dimethyl phthalate	131-11-3	-	5	-	10	
Dimethyl sulphate	77-78-1	0.05	0.26	-	-	Carc, Sk
Dinitrobenzene, all isomers	25154-54-5	0.15	1	0.5	3.5	Sk
Dinonyl phthalate	84-76-4	-	5	-	-	
1,4-Dioxane	123-91-1	20	73	-	-	Sk
Diphenylamine	122-39-4	-	10	-	20	
Diphenyl ether (vapour)	101-84-8	1	7.1	-	-	
Diphosphorus pentasulphide	1314-80-3	-	1	-	2	
Disphosphorus pentoxide	1314-56-3	-	1	-	2	
Diquat dibromide (ISO)	85-00-7	-	0.5	-	1	
Disodium disulphite	7681-57-4	-	5	-	-	
Disodium tetraborate, anhydrous	1330-43-4	-	1	-	-	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Disodium tetraborate, decahydrate	1330-96-4	-	5	-	-	
Disodium tetraborate, pentahydrate	11130-12-4	-	1	-	-	
Disulphur dichloride	10025-67-9	-	-	1	5.6	
2,6-Di-*tert*-butyl-*p*-cresol	128-37-0	-	10	-	-	
6,6'-Di-*tert*-butyl-4,4'-thiodi-*m*-cresol	96-69-5	-	10	-	20	
Diuron (ISO)	330-54-1	-	10	-	-	
Emery inhalable dust respirable	1302-74-5	 - -	 10 4	 - -	 - -	
Endosulfan (ISO)	115-29-7	-	0.1	-	0.3	Sk
Enflurane	13838-16-9	50	383	-	-	
Ethane-1,2-diol particulate vapour	107-21-1	 - 20	 10 52	 - 40	 - 104	Sk
Ethanethiol	75-08-1	0.5	1.3	2	5.2	
Ethanol	64-17-5	1000	1920	-	-	
2-Ethoxyethanol	110-80-5	2	8	-	-	Sk
2-Ethoxyethyl acetate	111-15-9	2	11	-	-	Sk
2-Ethylhexyl chloroformate	24468-13-1	1	8	-	-	
Ethyl acetate	141-78-6	200	-	400	-	
Ethyl acrylate	140-88-5	5	21	10	42	
Ethylamine	75-04-7	2	3.8	6	11	
Ethylbenzene	100-41-4	100	441	125	552	Sk
Ethyl chloroformate	541-41-3	1	4.5	-	-	
Ethyl cyanoacrylate	7085-85-0	-	-	0.3	1.5	
Ethyl formate	109-94-4	100	308	150	462	
Ethylene oxide	75-21-8	5	9.2	-	-	Carc
4-Ethylmorpholine	100-74-3	5	24	20	96	Sk

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Ferrous foundry particulate inhalable dust respirable dust	See paras 22–24	 - -	 10 4	 - -	 - -	
Flour dust	See para 25	-	10	-	30	Sen
Fluoride (inorganic as F)	16984-48-8	-	2.5	-	-	
Fluorine	7782-41-4	1	1.6	1	1.6	
Formaldehyde	50-00-0	2	2.5	2	2.5	
Formamide	75-12-7	20	37	30	56	
Formic acid	64-18-6	5	9.6	-	-	
2-Furaldehyde (furfural)	98-01-1	2	8	5	20	Sk
Germane	7782-65-2	0.2	0.64	0.6	1.9	
Glutaraldehyde	111-30-8	0.05	0.2	0.05	0.2	Sen
Glycerol, mist	56-81-5	-	10	-	-	
Grain dust	See para 26	-	10	-	-	Sen
Graphite inhalable dust respirable	7440-44-0	 - -	 10 4	 - -	 - -	
Gypsum inhalable dust respirable	10101-41-4	 - -	 10 4	 - -	 - -	
Halogeno-platinum compounds (complex co-ordination compounds in which the platinum atom is directly co-ordinated to halide groups) (as Pt)	See paras 27–28	-	0.002	-	-	Sen
Halothane	151-67-7	10	82	-	-	
Hardwood dust	See paras 41–42	-	5	-	-	Carc, Sen
n-Heptane	142-82-5	500	2085	-	-	
Heptan-2-one	110-43-0	50	237	100	475	Sk
Heptan-3-one	106-35-4	35	166	100	475	Sk
n-Hexane	110-54-3	20	72	-	-	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
1,6-Hexanolactam dust only dust and vapour	105-60-2	 - -	 1 10	 - -	 3 20	
Hexan-2-one	591-78-6	5	21	-	-	Sk
Hydrazine	302-01-2	0.02	0.03	0.1	0.13	Carc, Sk
Hydrogen bromide	10035-10-6	-	-	3	10	
Hydrogen chloride (gas and aerosol mists)	7647-01-0	1	2	5	8	
Hydrogen cyanide	74-90-8	-	-	10	11	Sk
Hydrogen fluoride (as F)	7664-39-3	1.8	1.5	3	2.5	
Hydrogen peroxide	7722-84-1	1	1.4	2	2.8	
Hydrogen sulphide	7783-06-4	5	7	10	14	
Hydroquinone	123-31-9	-	0.5	-	-	
4-Hydroxy-4-methylpentan-2-one	123-42-2	50	241	75	362	
2-Hydroxypropyl acrylate	999-61-1	0.5	2.7	-	-	Sk
2,2'-Iminodi(ethylamine)	111-40-0	1	4.3	-	-	Sk
Indene	95-13-6	10	48	15	72	
Indium and compounds (as In)		-	0.1	0	0.3	
Iodine	7553-56-2	-	-	0.1	1.1	
Iodoform	75-47-8	0.6	9.8	1	16	
Iodomethane	74-88-4	2	12	-	-	Sk
Iron oxide, fume (as Fe)	1309-37-1	-	5	-	10	
Iron salts (as Fe)		-	1	-	2	
Isobutyl acetate	110-19-0	150	724	187	903	
Isocyanates, all (as –NCO) Except methyl isocyanate		- -	0.02	- -	0.07	Sen
Isoflurane	26675-46-7	50	383	-	-	
Isoocytl alcohol (mixed isomers)	26952-21-6	50	271	-	-	
Isopentane	78-78-4	600	1800	-	-	
Isopropyl acetate	108-21-4	-	-	200	849	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$	
Isopropyl chloroformate	108-23-6	1	5.1	-	-	
Kaolin, respirable dust	1332-58-7	-	2	-	-	
Ketene	463-51-4	0.5	0.87	1.5	2.6	
Limestone total inhalable respirable	1317-65-3	 - -	 10 4	 - -	 - -	
Liquefied petroleum gas	68476-85-7	1000	1750	1250	2180	Carc (only applies if LPG contains more than 0.1% of buta-1,3-diene)
Lithium hydride	7580-67-8	-	0.025	-	-	
Lithium hydroxide	1310-65-2	-	-	-	1	
Magnesite inhalable dust respirable dust	546-93-0	 - -	 10 4	 - -	 - -	
Magnesium oxide (as Mg) inhalable dust fume and respirable dust	1309-48-4	 - -	 10 4	 - -	 - -	
Malathion (ISO)	121-75-5	-	10	-	-	Sk
Maleic anhydride	108-31-6	-	1	-	3	Sen
Manganese and its inorganic compounds (as Mn)		-	0.5	-	-	
Marble total inhalable respirable	1317-65-3	 - -	 10 4	 - -	 - -	
Mercaptoacetic acid	68-11-1	1	3.8	-	-	
Mercury and divalent inorganic compounds including mercuric oxide and mercuric chloride (measured as mercury)		-	0.02	-	-	
Methacrylic acid	79-41-4	20	72	40	143	
Methacrylonitrile	126-98-7	1	2.8	-	-	Sk

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Methanethiol	74-93-1	0.5	1.0	-	-	
Methanol	67-56-1	200	266	250	333	Sk
2-Methoxyethanol	109-86-4	1	3	-	-	Sk
2-(2-Methoxyethoxy) ethanol	111-77-3	10	50.1	-	-	Sk
2-Methoxyethyl acetate	110-49-6	1	5	-	-	Sk
(2-methoxymethylethoxy) propanol	34590-94-8	50	308	-	-	Sk
1-Methoxypropan-2-ol	107-98-2	100	375	150	560	Sk
1-Methoxypropyl acetate	108-65-6	50	274	100	548	Sk
Methyl acetate	79-20-9	200	616	250	770	
Methyl acrylate	96-33-3	5	18	10	36	
3-Methylbutan-1-ol	123-51-3	100	366	125	458	
Methyl cyanoacrylate	137-05-3	-	-	0.3	1.4	
4,4'-Methylenedianiline	101-77-9	0.01	0.08	-	-	Carc, Sk, BMGV
Methyl ethyl ketone peroxides (MEKP)	1338-23-4	-	-	0.2	1.5	
Methyl methacrylate	80-62-6	50	208	100	416	
2-Methylcyclohexanone	583-60-8	50	233	75	350	
Methylcyclohexanol	25639-42-3	50	237	75	356	
Methyl isocyanate (as –NCO)	624-83-9			0.02		Sen
N-Methylaniline	100-61-8	0.5	2.2	-	-	Sk
n-Methyl-2-pyrrolidone	872-50-4	10	40	20	80	Sk
5-Methylheptan-3-one	541-85-5	10	53	20	107	
5-Methylhexan-2-one	110-12-3	20	95	100	475	Sk
2-Methylpentane-2,4-diol	107-41-5	25	123	25	123	
4-Methylpentan-2-ol	108-11-2	25	106	40	170	Sk
4-Methylpentan-2-one	108-10-1	50	208	100	416	Sk, BMGV
2-Methylpropan-1-ol	78-83-1	50	154	75	231	
2-Methylpropan-2-ol	75-65-0	100	308	150	462	
Methyl-*tert*-butyl-ether	1634-04-4	50	183.5	100	367	

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		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Mica total inhalable respirable	12001-26-2	 - -	 10 0.8	 - -	 - -	
MMMF (Machine-made mineral fibre) (except for refractory ceramic fibres and special purpose fibres)		5mg. m^{-3} and 2 fibres/ millilitre				
Molybdenum compounds (as Mo) soluble compounds insoluble compounds		 - -	 5 10	 - -	 10 20	
Monochloroacetic acid	79-11-8	0.3	1.2	-	-	Sk
Morpholine	110-91-8	10	36	20	72	Sk
Neopentane	463-82-1	600	1800	-	-	
Nickel and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni) nickel and water-insoluble nickel compounds (as Ni)		 - -	 0.1 0.5	 - -	 - -	Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)
Nicotine	54-11-5	-	0.5	-	1.5	Sk
Nitric acid	7697-37-2	-	-	1	2.6	
Nitrobenzene	98-95-3	0.2	1	-	-	Sk
Nitromethane	75-52-5	100	254	150	381	
2-Nitropropane	79-46-9	5	19	-	-	Carc
Nitrous oxide	10024-97-2	100	183	-	-	
Orthophosphoric acid	7664-38-2	-	1	-	2	
Osmium tetraoxide (as Os)	20816-12-0	0.0002	0.002	0.0006	0.006	
Oxalic acid	144-62-7	-	1	-	2	
2,2'-Oxydiethanol	111-46-6	23	101	-	-	
Ozone	10028-15-6	-	-	0.2	0.4	
Paracetamol, inhalable dust	103-90-2	-	10	-	-	

Substance	CAS Number	Workplace exposure limit				Comments
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		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Paraffin wax, fume	8002-74-2	-	2	-	6	
Paraquat dichloride (ISO), respirable dust	1910-42-5	-	0.08	-	-	
Pentacarbonyliron (as Fe)	13463-40-6	0.01	0.08	-	-	
Pentaerythritol inhalable dust respirable dust	115-77-5	 - -	 10 4	 - -	 20 -	
Pentan-2-one	107-87-9	200	716	250	895	
Pentan-3-one	96-22-0	200	716	250	895	
Pentane	109-66-0	600	1800	-	-	
Pentyl acetates (all isomers)		50	270	100	541	
2-Phenylpropene	98-83-9	50	246	100	491	
Phenol	108-95-2	2	7.8	4	16	Sk
p-Phenylenediamine	106-50-3	-	0.1	-	-	Sk
Phorate (ISO)	298-02-2	-	0.05	-	0.2	Sk
Phosgene	75-44-5	0.02	0.08	0.06	0.25	
Phosphine	7803-51-2	0.1	0.14	0.2	0.28	
Phosphorus pentachloride	10026-13-8	0.1	0.87	0.2	2	
Phosphorus trichloride	7719-12-2	0.2	1.1	0.5	2.9	
Phosphorus, yellow	7723-14-0	-	0.1	-	0.3	
Phosphoryl trichloride	10025-87-3	0.2	1.3	0.6	3.8	
Phthalic anhydride	85-44-9	-	4	-	12	Sen
Picloram (ISO)	1918-02-1	-	10	-	20	
Picric acid	88-89-1	-	0.1	-	0.3	
Piperazine	110-85-0	-	0.1	-	0.3	Sen
Piperazine dihydrochloride	142-64-3	-	0.1	-	0.3	Sen
Piperidine	110-89-4	1	3.5	-	-	Sk
Plaster of Paris inhalable dust respirable dust	26499-65-0	 - -	 10 4	 - -	 - -	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Platinum compounds, soluble (except certain halogeno-Pt compounds) (as Pt)		-	0.002	-	-	
Platinum metal	7440-06-4	-	5	-	-	
Polychlorinated biphenyls (PCB)	1336-36-3	-	0.1	-	-	Sk
Polyvinyl chloride inhalable dust respirable dust	9002-86-2	 - -	 10 4	 - -	 - -	
Portland cement inhalable dust respirable dust	65997-15-1	 - -	 10 4	 - -	 - -	
Potassium hydroxide	1310-58-3	-	-	-	2	
Propane-1,2-diol total vapour and particulates particulates	57-55-6	 150 -	 474 10	 - -	 - -	
Propan-1-ol	71-23-8	200	500	250	625	Sk
Propan-2-ol	67-63-0	400	999	500	1250	
Propionic acid	79-09-4	10	31	15	46	
Propoxur (ISO)	114-26-1	-	0.5	-	2	
Propranolol	525-66-6	-	2	-	6	
n-Propyl acetate	109-60-4	200	849	250	1060	
Propylene oxide	75-56-9	5	12	-	-	Carc
Prop-2-yn-1-ol	107-19-7	1	2.3	3	7	Sk
Pulverised fuel ash inhalable dust respirable dust		 - -	 10 4	 - -	 - -	
Pyrethrum (purified of sensitising lactones)	8003-34-7	-	1	-	-	
Pyridine	110-86-1	5	16	10	33	
2-Pyridylamine	504-29-0	0.5	2	2	7.8	

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		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Pyrocatechol	102-80-9	5	23	-	-	
Refractory ceramic fibres and special purpose fibres		5mg.m^{-3} 1 fibre/millilitre		-	-	Carc
Resorcinol	108-46-3	10	46	20	92	Sk
Rhodium (as Rh) metal fume and dust soluble salts		 - -	 0.1 0.001	 - -	 0.3 0.003	
Rosin-based solder flux fume	8050-09-7	-	0.05	-	0.15	Sen
Rotenone (ISO)	83-79-4	-	5	-	10	
Rouge total inhalable respirable	1309-37-1	 - -	 10 4	 - -	 - -	
Rubber fume	See paras 33–37	-	0.6	-	-	Carc, limit relates to cyclohexane soluble material
Rubber process dust	See paras 33–37	-	6	-	-	Carc
Selenium and compounds, except hydrogen selenide (as Se)		-	0.1	-	-	
Silane	7803-62-5	0.5	0.67	1	1.3	
Silica, amorphous inhalable dust respirable dust		 - -	 6 2.4	 - -	 - -	
Silica, respirable crystalline		-	0.1	-	-	
Silica, fused respirable dust	60676-86-0	-	0.08	-	-	
Silicon inhalable dust respirable dust	7440-21-3	 - -	 10 4	 - -	 - -	
Silicon carbide (not whiskers) total inhalable respirable	409-21-2	 - -	 10 4	 - -	 - -	

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		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$	
Silver (soluble compounds as Ag)		-	0.01	-	-	
Silver, metallic	7440-22-4	-	0.1	-	-	
Sodium azide (as NaN_3)	26628-22-8	-	0.1	-	0.3	Sk
Sodium 2-(2,4-dichlorophenoxy) ethyl sulphate	136-78-7	-	10	-	20	
Sodium hydrogen sulphite	7631-90-5	-	5	-	-	
Sodium hydroxide	1310-73-2	-	-	-	2	
Softwood dust	See paras 41-42	-	5	-	-	Sen
Starch total inhalable respirable	9005-25-8	 - -	 10 4	 - -	 - -	
Styrene	100-42-5	100	430	250	1080	
Subtilisins	1395-21-7 (*Bacillus subtilis* BPN) 9014-01-1 (*Bacillus subtilis* Carlsberg)	-	0.00004	-	-	Sen
Sucrose	57-50-1	-	10	-	20	
Sulfotep (ISO)	3689-24-5	-	0.1	-	-	Sk
Sulphur hexafluoride	2551-62-4	1000	6070	1250	7590	
Sulphuric acid (mist)	7664-93-9		0.05			The mist is defined as the thoracic fraction
Sulphuryl difluoride	2699-79-8	5	21	10	42	
Talc, respirable dust	14807-96-6	-	1	-	-	
Tantalum	7440-25-7	-	5	-	10	
Tellurium and compounds, except hydrogen telluride (as Te)		-	0.1	-	-	

Substance	CAS Number	Workplace exposure limit				Comments
		Long-term exposure limit (8-hr TWA reference period		Short-term exposure limit (15 minute reference period)		The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives
		ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$	
Terphenyls, all isomers	26140-60-3	-	-	0.5	4.8	
1,1,2,2-Tetrabromoethane	79-27-6	0.5	7.2	-	-	Sk
Tertiary-butyl-methyl-ether	1634-04-4	50	183.5	100	367	
Tetracarbonylnickel (as Ni)	13463-39-3	-	-	0.1	0.24	
Tetrachloroethylene	127-18-4	50	345	100	689	
1,1,1,2-Tetrafluoroethane (HFC 134a)	811-97-2	1000	4240	-	-	
Tetrahydrofuran	109-99-9	50	150	100	300	Sk
Tetrasodium pyrophosphate	7722-88-5	-	5	-	-	
Thallium, soluble compounds (as Tl)		-	0.1	-	-	Sk
Thionyl chloride	7719-09-7	-	-	1	4.9	
Tin compounds, inorganic except SnH_4, (as Sn)		-	2	-	4	
Tin compounds, organic, except Cyhexatin (ISO), (as Sn)		-	0.1	-	0.2	Sk
Titanium dioxide total inhalable respirable	13463-67-7	 - -	 10 4	 - -	 - -	
Toluene	108-88-3	50	191	100	384	Sk
p-Toluenesulphonyl chloride	98-59-9	-	-	-	5	
o-Toluidine	95-53-4	0.2	0.89	-	-	Carc, Sk
Tributyl phosphate, all isomers	126-73-8	-	5	-	5	
1,2,4-Trichlorobenzene	120-82-1	1	-	5	-	Sk
1,1,1-Trichloroethane	71-55-6	100	555	200	1110	
Trichloroethylene	79-01-6	100	550	150	820	Carc, Sk
Trichloronitromethane	76-06-2	0.1	0.68	0.3	2.1	
Triethylamine	121-44-8	2	8	4	17	Sk
Triglycidyl isocyanurate (TGIC)	2451-62-9	-	0.1	-	-	Carc

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		ppm	mg.m^{-3}	ppm	mg.m^{-3}	
Trimellitic anhydride	552-30-7	-	0.04	-	0.12	Sen
Trimethylbenzenes, all isomers or mixtures	25551-13-7	25	125	-	-	
3,5,5-trimethylcyclohex-2-enone	78-59-1	-	-	5	29	
Trimethyl phosphite	121-45-9	2	10	-	-	
2,4,6-Trinitrotoluene	118-96-7	-	0.5	-	-	Sk
Tri-o-tolyl phosphate	78-30-8	-	0.1	-	0.3	
Triphenyl phosphate	115-86-6	-	3	-	6	
Tungsten and compounds (as W) soluble compounds insoluble compounds and others	7440-33-7	 - -	 1 5	 - -	 3 10	
Turpentine	8006-64-2	100	566	150	850	
Vanadium pentoxide	1314-62-1	-	0.05	-	-	
Vinyl acetate	108-05-4	5	17.6	10	35.2	
Vinyl chloride	75-01-4	3	7.8	-	-	Carc
Vinylidene chloride	75-35-4	10	40	-	-	
Wool process dust	See para 43	-	10	-	-	
Xylene, *o*-,*m*-,*p*- or mixed isomers	1330-20-7	50	220	100	441	Sk, BMGV
Yttrium	7440-65-5	-	1	-	3	
Zinc chloride, fume	7646-85-7	-	1	-	2	
Zinc distearate inhalable dust respirable dust	557-05-1	 - -	 10 4	 - -	 20 -	
Zirconium compounds (as Zr)		-	5	-	10	